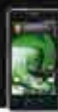




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# Stay human

A lot of people make the mistake of thinking that technology is just computer-related stuff – lines of code, hardware, software, that sort of thing. Sure, that's the area we think about today, and perhaps even for the past two decades, but the truth is the entire human history has been technology driven.

From cavemen who discovered flint, or the ability to hunt better using pointy sticks and rocks, to the invention of the wheel, and then onwards through history till today – what really drove the invention craze?

They say necessity is the mother of invention, but is it really that simple? Why has technology (used loosely, again) become the driving factor of our entire species?

There's something to be said about simplification of tasks. We look at the end result, and assume that technology's job is to help us reach said result as quickly as possible. Efficiency is the key.

Then again, maybe it's just to do away with the mundane. None of us really wants to pull out logarithmic tables to do complicated calculations, carrying the remainder in our heads.

Perhaps it's laziness? Do we want motorised transport because we're too lazy to walk, spell checkers because we're too lazy to learn to spell, gaming because we're too lazy to go outside and exert?

Einstein wasn't lazy, but he'd have a hard time coming up with Relativity in his lifetime if he had to invent mathematics and physics as well. If everyone starts at the same point, how much further can anyone get? Imagine having to build a house to live in everyday...would you ever really have time to perfect the plumbing?

I think technology is more like a cure to this indescribable and unbearable itch. Maybe it's a mix of all of the above and more, or perhaps it's just the next stage of our evolution – a way of extending our brains, and ourselves.

We need technology to get us the information we need, when we need it. Over the years, it has blended seamlessly into our psyche, and there are hundreds of tasks that we do everyday that we just don't think about anymore – making a simple phone call, answering an email, video chatting with someone from across the globe, paying bills, automating tasks, finding information... In

a million and more ways, we do such a lot whilst on auto-pilot mode.

Automating tasks, and not thinking about them is one thing, but as much as technology has mind-melded with us like a Vulcan to make us all powerful, perhaps we're also being assimilated like the victims of the Borg! No, I'm not a doomsday soothsayer trying to warn the world of a coming apocalypse at the hands of technology – what I'm trying to say is, perhaps we're losing a little too much of our humanness in the process.


One look at the majority of the likes, shares and re-tweets in the social world will tell you that way too much of it is just brainless clicking. We send email forwards mercilessly, and murder all languages with lazy slang. We troll, we watch pornography, download pirated content, phish for money, etc.

All of this is part and parcel of the same human condition that has been boosted using technology. Then again, so is Wikipedia, Khan Academy, open source and a million more good things.

It's important that we realise that technology can help us speed anything up, or bypass a million things, but it doesn't need to do that for everything. Some things need a human touch.

Although it can and will make our lives easier (or worse), it cannot start thinking for us – it's why Google's search suggestions are bang on target at times, and can make you wonder what the Google bot's been smoking at others.

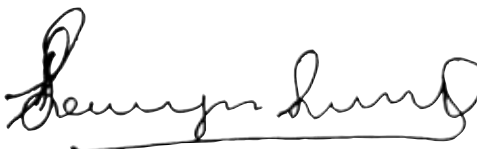
The real goal of this cover story – and this magazine, in fact – is to encourage us to use technology as a stepping stone instead of as a crutch – attempting to discover new and unique ways of using technology to enhance the human experience.

If we really want to advance and evolve, we have to realise when to let out the technology-enabled automaton inside us, and when to stay human. 



**Robert Sovereign-Smith**  
Executive Editor  
[editor@thinkdigit.com](mailto:editor@thinkdigit.com)

**“Imagine having to build a house to live in everyday...would you ever really have time to perfect the plumbing?”**



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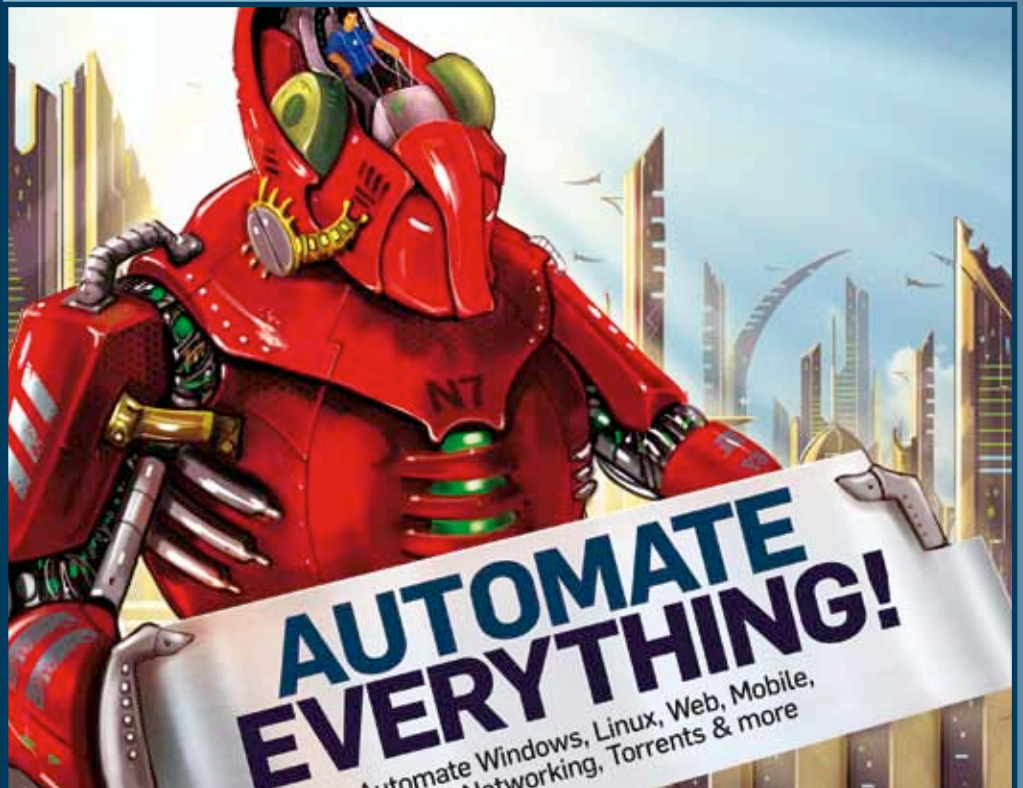
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## God is a programmer

We might be living in the most elegantly coded  
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## TRIED & TESTED



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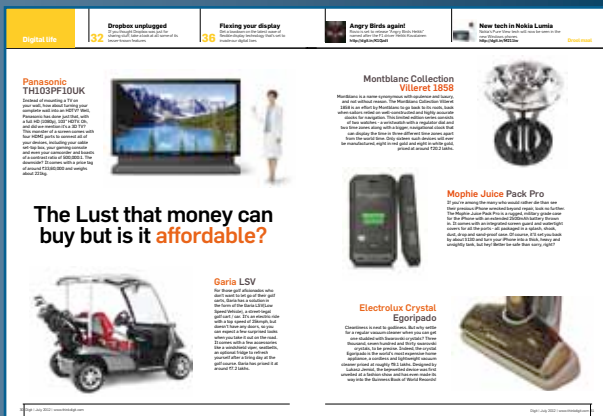


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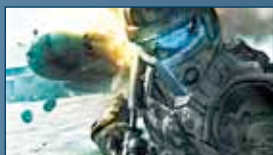
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Flight  
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Wreck it Ralph  
Stella Days

## Full Games

A mother's inferno  
Back to bed  
Foam  
Sphere

## Game Demos

Gratuitous Tank Battles  
Resonance

## E3 Coverage

The entire EA and Sony Press Conference

## By Demand

Windows 8 Release Preview (digit.in/wIn8rP for the key)  
Windows 7 USB/DVD Tool  
VirtualBox

## Suggested software

7 zip  
Adobe Reader 10  
Any Video Converter  
BurnAware  
Daemon Tools  
Daemon Tools  
Free Download Manager  
KeePass  
LibreOffice  
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Opera 12







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Writers **Abhinav Lal, Kul Bhushan**

#### Design

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Chief Photographer **Subhojit Paul**  
Sr Photographer **Jiten Gandhi**

#### Contributors

Writers **Hardik Kotecha, Mithun Mohandas, Seth Collins, Subodh Kolhe**

#### Production and Logistics

Sr GM - Operations **Shivshankar Hiremath**  
Manager Operations **Rakesh Upadhyay**  
Asst Production Manager **Vilas Mhatre**  
Asst Mgr **Vijay Menon**  
Production Assistant **Brahmanand Nikalje**  
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#### Brand

Product Mgr **Navneet Miglani**  
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Co-ordinator / Scheduling **Kishan Singh**

#### Circulation Sales

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Regional Mgrs **Jayanta Bhattacharyya, Norbert Joseph**  
Manager Circulation **Dharmendra Singh**  
Executive **Vijay Mhatre**

#### Reader Services

Lead Associate **Sourabha**  
Executives **Itishree, Pinky, Sudhir, Sufiyan**  
**+91-22-678 99 678 / help@thinkdigit.com**

#### Community Advisory Council

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Cover design **Manav Sachdev**

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National Manager:  
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Manager (South):  
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Senior Manager (West):  
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Manager (West):  
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Senior Executive (North):  
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Dell M110  
HTC One V  
Jabra Clipper  
Jabra EasyCall  
Lava Xolo X900  
LG 72M9500 Cinema 3D TV  
Nikon D4  
Olympus SZ-11MR  
Parallels Desktop 7  
Product Name  
Samsung Galaxy SIII  
Seagate Momentus XT 750 GB  
Sennheiser RS220  
Sony Alpha 77  
ZOTAC GTX 670 AMP! Edition

##### Motherboards Test

ASRock Z77 Extreme4  
ASUS P8Z77M-PRO  
ASUS P8Z77-V  
ASUS Maximus V Gene  
ASUS P8Z77 V Pro  
ASUS Sabertooth Z77  
ASUS P8Z77 V Deluxe  
Biostar TZ77 XE4  
ECS Z77H2-AX  
Foxconn Z77A-S  
Gigabyte Z77 G1 Sniper M3  
Gigabyte Z77X UD3H  
Gigabyte Z77X UD5H WiFi  
Intel DZ77GA-70K  
MSI Z77MA-G45  
MSI Z77A-G45  
MSI Z77-GD55  
MSI Z77A-GD80  
MSI Z77A-G43

##### Budget Smartphone Test

Micromax Superphone Ninja A50  
Nokia Asha 200  
Nokia Asha 302  
Nokia Asha 303  
Samsung Galaxy Pocket  
Samsung Galaxy Y Pro Duos  
Samsung Wave Y  
Spice MI-350N

##### WiFi Router Test

ASUS RT-N10+  
ASUS RT-N16  
ASUS RT-N56U  
ASUS RT-N53  
ASUS RT-N66U  
ASUS RT-N15U  
Belkin N750DB  
Buffalo WCR HP G300  
D-Link DIR 650L  
D-Link DIR 600L  
D-Link DIR 827  
D-Link DIR 636L  
Digisol DG-BR4000NG  
Digisol DG-BR4300NG  
Netgear WNDR3700  
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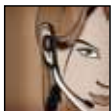
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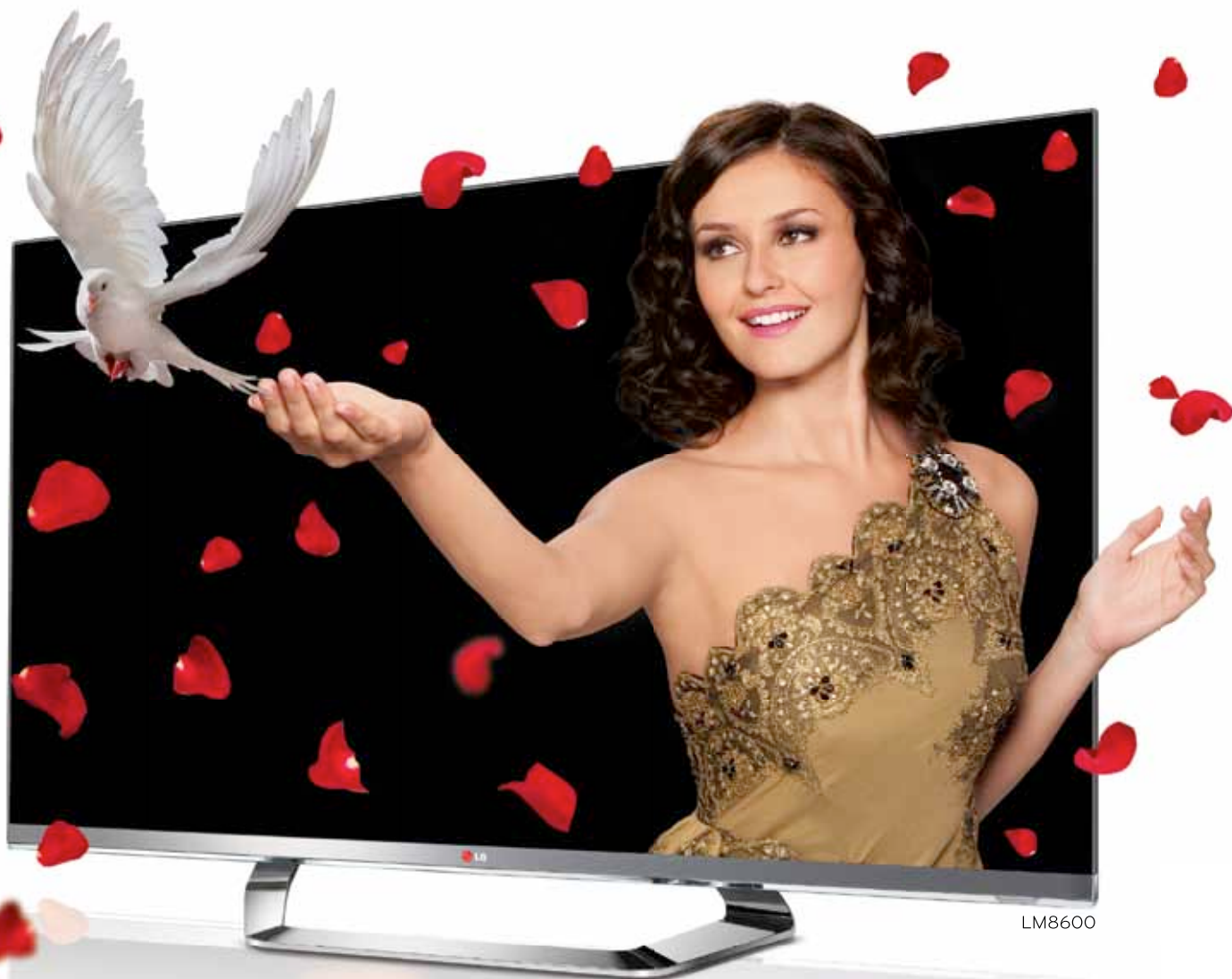
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**Nasdaq compensation**

The Nasdaq OMX group is set to announce compensation for brokers following a botched Facebook IPO release <http://digit.in/LzidLT>

✉ Your magazine is fab, really it is. When I was in the 1st standard, I saw my father buy Digit (as he was an engineer and loved gadgets). Now I'm in the tenth standard and seemed to have gained interest in technology from him. I first bought it last November. I was stunned after going through it (specially the "Facebook Timeline" part). The softwares, tutorials you provide in your DVDs proved to be very much useful for me. I love "The RSS Feed" by Robert. This June issue have surprisingly won my heart with the Devworx, \*Skoar!, the Fast Tracks and the 4 DVDs. Through comparisons of different gadgets, I have also helped one of my relatives buy a camera. All I want to say is "Keep up the good work".

*Sayantani Mridha*

It feels great to know that the Digit legacy has been passed on to you, and we hope that you will pass it on one day to your child:) Learn some ways to automate your life in this month's cover story.

*Robert*

✉ I started reading Digit from last month and I find it very interesting and it gives a lot of knowledge to me about present technology which I could never imagine even in my dreams. I am a student of Class 10 studying in Kendriya Vidyalaya, Port Blair. I'm thinking of subscribing to the magazine but my father won't allow me to do it. First of all I would like to thank your team for making such an advanced and technical magazine which has inspired me about technology and also inspired many like me. Most of the articles are so nice that I usually finish reading them within three days of purchasing the magazine. I have some questions and suggestion about the magazine and DVDs:

1. Can you please tell me that how to install the software and games that are present in compressed form? I can't install it because I'm a beginner in computers.
2. I can suggest you one thing. If anybody subscribes to Digit for 1 year you could give them a newly released game and if anybody subscribes to it for three years you could give them two or three game DVDs because India is a fan of games i think.
3. The language used in this magazine is very simple and it's easy to understand.

## Feedback for the June 2012 issue of Digit



Thank you for not complicating things.

*Ankur Mondal*

First of everyone from Team Digit thanks you for your kind words. Reading such mails makes our day. As for your questions let me try to answer them as best as I can.

1. We always include a compression software like 7zip or WinRAR which can open most if not all compressed files that are included on the DVD. If the files are disc images(.iso/.img/.cue/.bin) then you can either 1.1 Use a software like Burnaware/MagicISO to write those images onto a CD/DVD and then install the software from the disc. or 1.2 Then Daemon Tools to mount that image and install the game/software. Read more at <http://digit.in/LpZgQr> to learn about the process.
2. We've been having discussions with our brand team regarding possible gift options for subscribers. We'll surely consider having games as subscriber gifts. In any case we always have included a couple of Indie Games with each month's DVD, check them out.
3. And thank you for writing to us!

*Anirudh*

✉ This comes from a huge fan of digit! I am presently in class 8, and my first issue of digit was the November 2011 one. As they always say, "first impression, last impression" and

my impression of this magazine today is that you guys are incomparable. I never took any interest in technology before I came across this magazine. Once I pick up Digit, I am unable to keep it down until I finish reading it. I must say, you folks are doing a fantabulous job, wish you best of luck for the future. may digit always soar high! I am PROUD to be a digitian.

*Tavisbi*

Guess what? We are proud to have readers like you. Your feedback means a lot to us and we always look forward to hearing more from you.

*Siddharth*

✉ Hi! This is my first letter to Digit. I came to know about digit in the beginning of this year from my friend. I started buying the magazine from April 2012. The DVDs are really awesome. I was going through the PDF file & found a game called "Line Rider" I googled it and I got addicted (it really is an addictive game) I tried to download the game "Line Rider 2: UNBOUND" but I couldn't B'cuz my internet speed is too slow to download the game. So I need a favor from you: Can you give this game in the next month's issue I will be really thankful to you guys. And I also need to change my PC, I want it for gaming purpose. My budget is around 14k - 15k. Please suggest the best for my budget.



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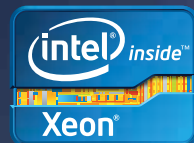
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## 8-pen for Android

Google recently launched a dedicated local video site in Indonesia aimed to help improve the discovery of local videos. <http://digit.in/L9Isv2>



## YouTube wins copyright war

A French channel, TF1, lost the battle over copyright infringement when its programs were uploaded on the video-sharing site. [digit.in/KVTX4b](http://digit.in/KVTX4b)

### LETTER OF THE MONTH

✉ I love reading digit magazine every month and I have started reading digit since last year. Only after reading this did I thought of purchasing a kindle and Man! was I right, it's a great device and the reading experience is awesome. The collection of novels and magazines are simply amazing in the amazon.com website, one thing missing from the amazon collection though is digit, I mean being the best technical magazine in India, why don't you have a digitized version of your magazine.

I just hate the fact that the digit magazine is not available in my district, I don't think there are many technology enthusiast in here, but still every time I have to wait for someone in my family to go to another city so that they can bring me one, I know the solu-

tion to this is to subscribe the magazine, but I don't want to do that as my location changes every 1-2 months, so I think after reading this you will seriously consider the issue of digitizing the digit and make a kindle edition available of your magazine as soon as possible. If by any means you are considering not to digitize the magazine than as a big digit fan I would like to know the reason for this. Waiting for your.

*Nirvan Gandhi*



Hi Nirvan, We've already started digitizing the magazine. Right now we're available on Magzter which covers Android and Apple devices and we are always looking towards expanding more, so give us some time, we'll get there.

*Robert*

Another suggestion for you guys : could you please increase the game trailer and movie trailers on the DVDs they are really awesome. The June issue rocked keep it up...

*Binayak Chakraborty*

It is really unfortunate that we've already sent out the DVDs for this month's issue at the time we got your letter. Tell you what, we'll try our best to include it in the next month's DVDs. As for the configuration, check out our Killer Rigs section to get a PC configuration that suits your budget. Thanks for writing in.

*Nimish*

✉ I'm writing my first letter to you since I bought digit for the first time in February, 2010. Personally I never felt to complain about anything that is provided by you, but now I think it will be my selfishness if I do not send an email appreciating you. Yesterday the result of my secondary exams were declared, I got 86% marks. I was surprised to see that I got highest marks in my additional subject, which was Computer Awareness Programme! I did not even have the books but had digit. You're my inspiration guys. I'd like to

thank you from the bottom of my heart. Keep up the good work you're doing! I wish to see digit to be the most popular magazine in the earth. And thanks again for the fast tracks! Thank you a lot!

*Subhrajyoti Das*

Hi Subhrajyoti, It's a wonderful feeling to hear such stories. We are glad our magazine helped you out with your studies.

*Nimish*

✉ Hey why you not give all the links in the mag in one web-link such as tinypaste, pastebin etc? Have u ever tried typing all the links 1 by 1?

*Sagnik Bose*

Hi Sagnik, We do type out each and every bit.ly link during proof-reading to make sure all of them are working prior to the magazine going in for print. However, we do have one link in our World View section which combines each and every link in the section. For everything else including the World View links you can always check out our bit.ly stream -> <http://bitly.com/u/thinkdigit1>

*Nash*

✉ I have been thinking for a long time to write to DIGIT about the "Good Job" you guys are doing but every time I scrapped my mail thinking that it would not be published. But, I don't care anymore if it gets published or not. I just wanted to say Thanks to your team for the best content on Magazine and best Customer Service I have ever seen. I am a Magazine Only subscriber and when I heard about the Anniversary Issue, I had to get the complete package this month but it would mean I would end up with two magazines so I contacted your Customer care and the next thing I know is I got this magazine with all the extras and my regular subscription is extended for a month. I was so happy to see the magazine on my doorstep.

On another note, I was planning to get a Windows phone but the Windows Phone Market in India is very poor. I saw Samsung US website and saw Samsung Focus is the phone which is meeting all my requirements but not available here. Do you have any idea what could be the reason for such partiality for Indian buyers knowing that India's Mobile Industry is one the fastest growing Industry in the World? I guess I have to wait for my turn to go to US and get this. Also, for a quite some time now I was thinking of a Kick-ass Desktop around 75K but again the same problem of limited choices hit me. I feel so jealous & helpless when I get offer mails from Amazon, Newegg, Bestbuy.

I would also like to suggest that please reduce Ads by some amount and also push those to the end of the magazine. Now when I open the magazine, I find almost 50% of the even numbered pages from the start is full of ads, it would be better if you restrict ads at the beginning of the magazine and continue at middle or end of the magazine

*Priyam Mitra*

Thanks for the compliments Priyam. The Samsung Focus is available on eBay for as low as ₹12,990 with dealer warranty. Adverts help subsidise the cost of the magazine so that our readers don't have to pay more, hope you understand.

*Siddharth*

### CORRIGENDUM

In June 2012, the designation of Richard Rutledge (Pg. 90) was wrongly printed as Chief Operating Officer. The correct designation is Senior Vice President, Marketing, Western Digital.



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**WP + Tumblr**

Blog platform WordPress has added an integration option with Tumblr, adding one more platform to its Publicize module <http://dgit.in/KGNYGK>

**FB dead by 2020, says analyst**

An American analyst has made tall claims that Facebook would disappear by 2020 the way Yahoo has now <http://dgit.in/MHanF9>

# Indian ISPs unblock file-sharing sites after Madras High Court ruling

**M**adras High Court has ruled that ISPs cannot block entire websites to prevent a single piece of pirated content to be shared online, much to Indian netizens' relief.

The HC order came on June 15, says the copyright holder has to list the infringing URL, rather

seeking blocking of the entire website. "The order of interim injunction dated 25/04/2012 is hereby clarified that the interim injunction is granted only in respect of a particular URL where the infringing movie is kept and not in respect of the entire website. Further, the applicant is directed to inform

about the particulars of URL where the interim movie is kept within 48 hours," the court said.

Last month, millions were taken aback after a court ruling forced the ISPs to block file-sharing and streaming websites such as ThePirateBay.se, Vimeo.com, Torrentz.eu, KickAssTorrents.com, and BitSnoop.com.

The move was considered to be a mass crackdown on the online piracy industry by the Indian government. This irked Anonymous India, which went on to launch an extensive campaign against the ISPs and government sites. They also held an 'Occupy' protests (read more on our coverage at <http://dgit.in/LFuLCD>).

## Apple patent application shows removable lens camera for iPhone

**A** filing at the U.S. Patent and Trademark Office shows an iPhone-like device with a unique switchable lens mobile camera. Wonder why?

The Apple patent application, called 'Back Panel for a Portable Electronic Device with Different Camera

Lens Options,' describes a camera that would potentially accept add-on lenses and filters, complete with mounts for them. Describing the system, the application reads: "It would be desirable to provide a structure for a compact device that allows the end user to reconfigure the optical arrangement of the device while retaining the benefits of assembling the device using a pre-assembled digital imaging subsystem." According to Apple Insider,



Camera goodness abound!

the proposed new camera for the iPhone would feature a 'digital imaging subsystem with a lens that has an optical axis,' apart from a removable back panel would allow access to the subsystem itself. To give a discrete optical system, the back panel (with the lens) would fit onto the imaging system with the iPhone case holding it into place. Potential lens and filter applications include an IR-cut filter, a macro lens, and a lens baffle – lens combination.

## EA, Wooga pulling games from Google+ due to lack of active and engaged users

**R**ecently a report revealed that Google's social network wasn't doing well in terms of user engagement in spite of having a 100 million plus global user base. The report further said that an average Google+ user posts once every 12 days, and even after a user has posted five times, there's still a 15 percent chance the user will never post again. The impact of dipping popularity of the social networking website are now becoming apparent – a number of popular game titles have been pulled out of the Google+ due to lesser active users on the site. Bejeweled Blitz by EA's PopCap division has been removed. "PopCap has decided to suspend Bejeweled

Blitz on Google+ to redeploy our resources to other adaptations of Bejeweled," a PopCap spokesperson said. "Certainly, Google is a valuable gaming partner for PopCap and EA, and we'll continue to develop for Google platforms." Besides

Bejeweled, social game developer Wooga has also announced removing its games, Diamond Dash and Bubble Island, from Google+ on July 1. Wooga had already pulled



Why you no like me?

out its Monster World title in May. Wooga revealed that the company had decided to remove its games from Google+ simply because Facebook had larger base of active users and it was unlikely that users playing games on Facebook will switch to another platform for gaming.



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**New Google patent**

Google's move to revolutionise the smartphone market with location-based alerts <http://dgit.in/Ltq1kj>

**Steelseries wow wireless mouse**

Steelseries showcased at E3 a World of Warcraft wireless mouse, which sports a themed skin, glowing white runes and logo <http://dgit.in/L4t6pS>

## Google launches initiative to preserve endangered languages

Google has taken an initiative to prevent endangered languages from vanishing forever. The initiative is called 'The Endangered Languages Project'. Google aims to use the latest technology to encourage communication between people familiar with languages on the verge of extinction and create a comprehensive database that preserves the language forever.

"Today we're introducing something we hope will help preserve languages on the brink of disappearing – the Endangered Languages Project, a website for people to find and share the most up-to-date and comprehensive information about endangered languages," wrote Clara Rivera Rodriguez and Jason Rissman, project managers of Google's




Linguists around the world should breathe a sigh of relief

le's Endangers Languages Project, in a blog post (read more at: <http://dgit.in/Mo4GHo>)

Google further said that the move to create database of the 3,000+ endangered languages

would help in preserving "cultural diversity, honouring the knowledge of our elders and empowering our youth". Google hopes technology helps people familiar with such languages communicate more and preserve them as well.

Google's initiative is backed by a new coalition, called the Alliance for Linguistic Diversity. Under the project, Google will provide users a dedicated space to store such languages and access research. At [endangeredlanguages.com](http://endangeredlanguages.com), users can upload video, audio, or text files and are encouraged to memorialize recordings of rare dialects. Google seeks contributions from the experts in the field of language preservation.

Only half of the about 7,000 languages spoken today are likely to survive past the end of the century, says a project video on YouTube. 

## Facebook phases out Credits, introduces local currencies format


Facebook has announced it will be phasing out its virtual payment system, Facebook Credits, and start allowing app and game developers to accept local currency instead. The company has also introduced subscription plans, especially for media and entertainment companies.

According to many industry watchdogs, the move from Facebook is being considered as an attempt to attract more investors after the widely discussed IPO debacle. The social network's

official line, however, is that it's simplifying the process. Launched in 2009, the credits system has been extensively used to purchase virtual goods on games and apps, with some reports claiming the number of users to be about 15 million.

"We are updating our payments product to support pricing in local currency (ex: US dollar, British pound and Japanese yen) instead of Credits. By supporting pricing in local currency, we hope to simplify the purchase experience, give you more flexibility, and make it

easier to reach a global audience of Facebook users who want a way to pay for your apps and games in their local currency," said Facebook on its website. The remaining Credits and gift card balances will be converted into local currency, which

users can use for buy in-app items. Local currency support for in-app purchase is likely to be rolled out in the next few months, and by this year end, all the apps or games selling virtual systems will switch to the new local currency system. 

REASON  
1

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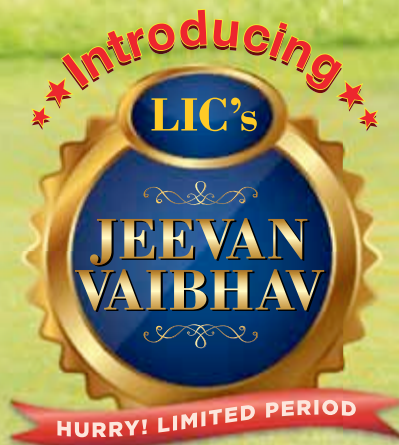
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## Web Watch

22

Get the latest dope on all the news analysis and in-depth views from the latest buzz in the world of web

## App Watch

26

This month we take a look at some of the best apps on Android, iOS and Windows operating systems

## Motorola introduces Defy XT, Defy Mini in India

**M**otorola India has introduced two new rugged Android-based smartphones, Defy XT and Defy Mini. The new Defy smartphones are water-resistant and dustproof. They also come with Corning Gorilla Glass and larger battery. The Defy XT has been



Motorola defy xt

priced at ₹16,190, whilst the Defy Mini will be available for ₹11,490. The Motorola Defy XT runs on Android 2.3 Gingerbread operating system. It has 5 MP rear camera with LED flash and a front facing VGA camera. Powered by a 1 GHz processor, the Motorola Defy XT comes with a 1,650 mAh battery, which is rated to deliver 9.5 hours of talktime. The Motorola Defy Mini runs on Android 2.3, has a 3.2-inch touch screen with 480 x 320 pixels resolution. The Defy Mini sports 3MP primary camera with LED flash and a front facing VGA camera. **[d]**

## Samsung Galaxy S III Available for ₹43,180, S II gets ICS

**T**he Samsung Galaxy S III is officially available in India, with the 16GB version retailing for a staggering MRP of ₹43,180. Looking at the price, it is hard not to make comparisons with the iPhone 4S and its controversial launch in India, at its own outrageous ₹44,500 pricing.

The Samsung I9300 Galaxy S III features the Korean giant's new 32nm 1.4GHz quad-core ARM Cortex A9 processor on the Exynos 4412 (Exynos 4 Quad) chipset with 1GB of RAM, and a Mali-400MP GPU.

The 8.6mm-thick Samsung Galaxy S III packs a 4.8-inch 720p HD Super AMOLED Gorilla Glass display, an 8MP rear autofocus camera capable 1080p HD video recording, as well as a 1.9MP front-facing camera, capable of 720p HD video recording.

Smart features include gesture recognition, S-Beam, Buddy



Samsung-Galaxy-S-III

Photo Share, Best Photo Mode, Face Zoom, Face Slideshow, Group Tag, Social Tag, SmartStay, S Health, exclusive navigation features, and, a brand new Music Hub that features over 17 million songs along with a Scan and Match feature.

Meanwhile, the Galaxy S II ICS update has started rolling out in India, while newer S II units feature ICS out of the box. The move by Samsung ensures the company has a device in the sub-₹30,000, 4-inch dual-core

smartphone, while providing an up to date operating system to users.

The Samsung Galaxy Ace Duos (GSM-GSM) has also been officially launched in India priced at ₹15,090. It runs on Android 2.3 Gingerbread, with a 3.5-inch 320 x 480 LCD display, 832MHz processor, 5MP rear camera, 3GB built-in storage, a 1,300 mAh battery, which is rated to deliver 6.5 hours of talktime on 3G, and 16 hours of talktime on 2G. **[d]**

## Snapdragon S3-based HTC One S available online in India for ₹33,000

**T**he Android 4.0 ICS-based HTC One S is available in India from online retailers. At the time of writing, this One S costs ₹33,000 (Saholic) and ₹36,157 (Infibeam).

While the retailers are listing a 1.5GHz dual-core processor Qualcomm Snapdragon S4 Krait chipset, previous

reports about LTE-integrated S4 chipset shortage indicate the HTC One S is reportedly actually shipping in India with the less-efficient, previous generation 1.7GHz dual-core Snapdragon S3 processor – at least to start with. Even the discounted ₹33,000 does not seem like a very good deal however, especially with the

previous generation chipset, when dual-core devices like the Galaxy S II (which now ships with ICS out-of-the-box) are priced at less than ₹28,000. It comes with 1GB of RAM, 16GB built-in storage without microSD expansion slot, 8MP camera, VGA front camera, no FM radio, and a 1,650 mAh battery. **[d]**

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- Ultra quiet cooling system to fit to working environment
- Mac: Time Machine® Compatible

**100 million**

The latest version - Angry Birds Space - has been downloaded 100 million times, reported Rovio.  
<http://dgit.in/KxeAdD>

**Whet your "App-etite"**

The Zune marketplace finally hits the magic figure of 100,000 apps  
<http://dgit.in/KcCPho>


## Nokia 808 PureView launched at ₹33,899

**N**okia has finally launched the 808 PureView in India, giving it an MOP of ₹33,899. The new 41 MP cameraphone was introduced back at MWC2012, and was one of the highlights of the event, being the first mobile phone to boast of such a massive sensor (1/1.2-inch with ND filter). Its 41 MP rating translates to 38 MP effective, though by default, the camera clicks extra-sharp and light-sensitive 5 MP and 8 MP images, condensing seven adja-

cent pixels from the original 38 MP image into one.

The autofocus camera on the Nokia 808 PureView features an f/2.8 Carl Zeiss lens with 4X optical zoom and a

Xenon flash, apart from an LED light for video recording (it is capable of 1080p HD at 30 fps), geo-tagging, and stereo sound recording. The 808 PureView will ship

with Nokia Symbian Belle onboard. It comes with a 4-inch 640x360 pixel capacitive touchscreen with Gorilla Glass and ClearBlack technology, a single-core 1.3GHz ARM11 processor, 512MB of RAM, 16GB of built-in storage, 1GB of ROM, active noise cancellation with dedicated mic, accelerometer, proximity sensor, digital compass and a 1,400 mAh battery rated to deliver up to 465 hours of 2G standby time, and 11 hours of 2G talktime. 



Nokia-808-PureView-522

## Sony launches Xperia P, Sola and U in India; details Miro, Acro S and Go


**S**ony Mobile India has officially launched the Xperia U, Xperia Sola and Xperia P devices in the country, at retail prices of ₹17,399, ₹19,999, and ₹25,449, respectively.

Sony has further expanded its Xperia portfolio with the unveiling of the new Xperia Miro, which runs on Android 4.0 Ice Cream Sandwich. The Xperia Miro features a 3.5-inch touchscreen with a 5MP camera, Xperia Timescape UI with Facebook integration.

Meanwhile, Sony also detailed the Xperia Acro S and Xperia Go, rugged and waterproof offerings, destined to hit shelves sometime in Q3 2012.

The Android 4.0 Ice Cream Sandwich-based Sony Xperia Acro S bears a 4.3-inch 720p

HD Reality display, a 1.5 GHz dual core processor, 1 GB of RAM, 16 GB of built-in storage (11 GB of which is user accessible), and a 12 MP camera with an Exmor R sensor, a f/2.4 aperture, and 1080p HD video recording capabilities. The Android 2.3 Gingerbread-based Sony Xperia Go bears a 3.5-inch 480x320 Reality display, a 1 GHz dual-core processor, 512 MB of RAM, 8 GB of built-in storage (of which, only 4 GB is user-accessible), and a 5MP camera with 720p HD video recording.


Sony has also confirmed it will not be rolling out the latest Android 4.0 Ice Cream Sandwich update to its Xperia Play smartphone, in order to ensure the consistent and stable experience of the Play is maintained. 

## HTC announces its first dual-SIM smartphone - the HTC Desire V

**H**TC has announced its first dual-SIM smartphone (GSM + GSM), the HTC Desire V. The device was announced in Ukraine for a July release, but is expected to hit Indian shores in the near future.

The HTC Desire V runs on Google's latest operating system Android 4.0 Ice Cream Sandwich straight out of the box. In terms of specifications under the hood, the device has a Qualcomm 1 GHz Cortex-A5 processor, Adreno 200 graphics,

512 MB RAM, a 4-inch display with a resolution of 480x800 and a 5 MP rear snapper but no front facing camera.

For all the audio buffs, the device comes with Beats Audio (something that has become a standard with HTC smartphones). The Desire V has 4GB internal storage which is expandable via a microSD card slot. It also has Bluetooth 4.0. The device measures 118.5 mm x 62.3 mm x 9.3 mm and weighs 114 gms making it a run of the mill Android device. 

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**Apple Vs Google Maps**

Apple has dumped Google Maps and is looking to provide its own maps application  
<http://dgit.in/M7gdd1>

**Dual-core Windows Phones**

Qualcomm announced its Snapdragon S4, finally, a dual-core processor for Windows Phone  
<http://dgit.in/MjpiPl>

## Microsoft's So.cl social network opens to everyone

Microsoft silently launched its social network, So.cl, which had been in development for almost a year. The new social networking website is said to help students connect with each other.

"We expect students to continue using products such as Facebook, Twitter, LinkedIn and other existing social networks, as well as Bing, Google and other search tools. We hope to encourage students to reimagine how our everyday communication and learning tools can be improved, by researching, learning and sharing in their


everyday lives," says Microsoft on So.cl's FAQ page. Pronounced



Microsoft social networking so.cl

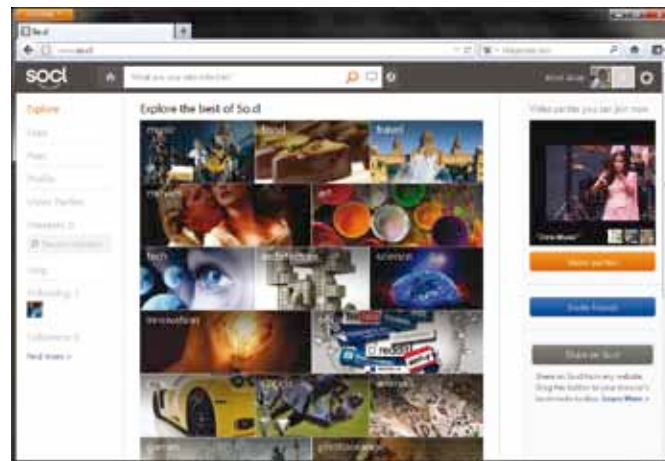
"Social", Microsoft says the social network is not pitted against Facebook or Twitter. Instead, it is an additional layer to the existing social networking concept – and accepts log in via a Facebook or Windows Live account. However, So.cl is quite similar to other social media sites, as

it allows users to share pages of interest, assemble montages of media, and hold discussions. By default, all searches in So.cl are public. But users can mark their content as "private" or delete it as well. The layout looks similar to Google+, with elements from Facebook, Twitter and Pinterest.

Like Facebook, users can follow other So.cl users or follow interests such as art and films. Users can share their activity on the social network with other users. Clicking on the "Everyone" feed, users get to see what So.cl users are searching for and sharing. Users can also choose to post their So.cl activity on their Facebook wall. One of the major highlights of the So.cl is the "video parties" feature, which enables users to create a slideshow of videos. The feature, inspired by YouTube's video sorting, also allows users to skip videos they did not find appealing. 



Video parties on So.cl



So.cl screenshot

## Google's transparency report highlights 'alarming' rise in web censorship

Google in its latest transparency report revealed that the number of requests for content removal from the governments of different countries, including the Western democracies, has substantially increased.

Google claimed it had received more than 1,000 requests from the governments around the world to pull down content such as YouTube


videos and search listings. Google added it had removed half of the content requested by the governments.

"Unfortunately, what we've seen over the past couple years has been troubling, and today is no different," Dorothy Chou, Google's senior policy analyst, said in a blog post. "When we started releasing this data, in 2010, we noticed that government agencies from different countries would sometimes ask

us to remove political content that our users had posted on our services. We hoped this was an aberration. But now we know it's not."

For India, Google said, there is a sharp rise of 49 percent in online content censorship from the country. However, the requests made by the Indian government were not published in the company's transparency report. The Pakistan government sought removal of six

YouTube videos that allegedly ridiculed the country's military and senior leaders. Google, however, did not adhere to the request. The Thailand government asked Google to remove as many as 149 YouTube videos that allegedly mocked the monarchy in the country.

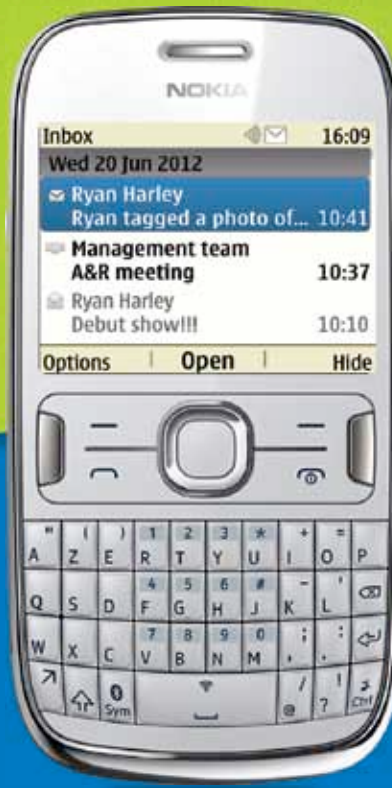
In total, over the last six months Google complied with an average of 65 per cent of court orders and 47 per cent of "more informal requests." 

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**Internet-based firms sued**

The Delhi High Court sought responses from Facebook India and Google India on a plea for recovery of taxes on their income. <http://dgit.in/KfV04e>

**New Google domains?**

Google has applied to ICANN for a bunch of new domains for its core products to improve user experience. <http://dgit.in/M8yjeL>

## Yahoo launches Axis

**Y**ahoo is not out from the Internet search game yet. The Internet company has just announced the launch of a new mobile browser and search tool called "Yahoo Axis". Launching initially as an application for the iPhone and iPad, Axis comes with a range of new browsing features. Yahoo is also offering these features as a plug-in for the major desktop Web browsers – Chrome, Internet Explorer, Firefox and Safari – having HTML-5 graphic capabilities. Yahoo plans to roll out Yahoo Axis for other mobile platforms soon. Users can download the new Yahoo Axis from Apple's App Store.

Yahoo Axis, like any other search utility, comes with a search box. While typing your query, you will get suggested search queries dropping down



Axis-Yahoo-web-browser icon

added useful features like Pinterest integration and sharing to make using tabs even easier. "Axis is the first of its kind to challenge the status quo of the typical search and browse experience: a results page, ten blue links, clicking back and forth between links and the results page, the need to start over when you move to another device," Yahoo says on its blog. "Axis is the first time the search experience evolves from a destination to a companion. It's the first search experience to provide



Yahoo! Axis available on the desktop across a variety of operating systems

– similar to Google search. But what appears is not the traditional blue links, but a filmstrip-like view across the top of the screen, featuring large thumbnails of search result pages. To open the full page, you have to tap one of the thumbnails. Swipe to visit the next search result.

Yahoo Axis also supports image search. Yahoo has also

visually rich page previews of results instantly as you type. It's the first mobile browser that connects with any major desktop browser. Axis is the first browser to really change the game," it adds. Axis comes just days after Microsoft revamped its Bing search results, deepening integration with social networks. Last week, Google announced

## EA, Wooga pulling games from Google+ due to lack of active users

**I**n May, a report revealed that Google's social network wasn't doing well in terms of user engagement in spite of having a 100 million plus global users base. The report further said that an average Google+ user posts once every 12 days, and even after a user has posted five times, there's still a 15 percent chance the user will never post again.

The impact of dipping popularity of the social networking website are now becoming apparent – a number of popular game titles have been pulled out of the Google+ due to lesser active users on the site. Bejeweled Blitz by EA's PopCap division was removed.

"PopCap has decided to suspend Bejeweled Blitz on Google+ to redeploy our resources to other adaptations of Bejeweled," a PopCap spokesperson told TechCrunch. "Certainly, Google is a valuable gaming partner for PopCap and EA, and we'll continue to develop for Google

platforms." Besides Bejeweled, social game developer Wooga has also announced removing its games, Diamond Dash and Bubble Island, from Google+ on July 1. Wooga has already pulled out its Monster World title in May. Wooga revealed that the company had decided to remove its games from Google+ simply because Facebook had larger base of active users and it was unlikely that users playing games on Facebook will switch to another platform for gaming.

Time in its report sheds light on problems faced by Google's social networking. The report points out that in spite of Zynga's coming on board with Google for bringing games on the network, users didn't turn up. It also suggests that Google should not just focus on "mimicking" Facebook, but concentrate on the fact that its social network, Android and Chrome "appeal to tech-savvy users" and should come with something big. Read the full Time report here. [\[1\]](#)

a new search feature called "Knowledge Graph" that provides more data snippets

alongside its query results than the regular search engine currently provides. [\[1\]](#)

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## Evernote update for Windows

The new update for Evernote allows you to work more effectively. The new powerful feature 'Activity Stream' makes it easier than ever before. <http://dgit.in/NErNCM>

## RIM to split into two?

According to a British newspaper, RIM is considering breaking up into two divisions: handset and messaging network division.

# The best apps from the non-iOS eco-systems

This month we look at the best app for Windows Phone and Android

## Windows Phone

Windows Phone has been under a lot of flak for a long time for not having enough apps in their ecosystem. Analysts are not too convinced about the quality of those apps either. When they launched in India in October 2011 they were at 35,000 apps and now there are more than 1,00,000 apps in the Windows Phone Marketplace. But coming back to quality, while the perception may not be completely baseless we did manage to find a few interesting apps.

### Bookviser

Every platform these days has plenty of eBook readers, not only in the wild but also as part of the customisations that manufacturers implement on the plain vanilla base OS. Bookviser is a free eBook reader that offers a wide variety of features. First the basics - in terms of formats, it supports EPUB, FB2 and TXT. Apart from accessing your own book collection you can search and download public domain books from the likes of Project Gutenberg. The UI is pretty slick and provides easy access to last opened books. For every book the app intelligently manages to remember the page you were on. You have options to customise your reading experience by changing colour and font size. The page turn transitions and effects are not bad either. A few things such as word searches, annotations and dictionary look-ups could've been added



though. If you're looking for those features, another eBook app called Freda could be the app for you. The only trouble with Freda is that it's not very stable and till recently was a clunky app.

**Rating: 4/5**

### PC Remote

Let's face it, most of us watch movies on our computers. And with screen sizes becoming larger by the day, who wouldn't want to sit back and enjoy a pseudo-theater experience? The only trouble is when you're away from the PC it becomes a pain when you need to pause



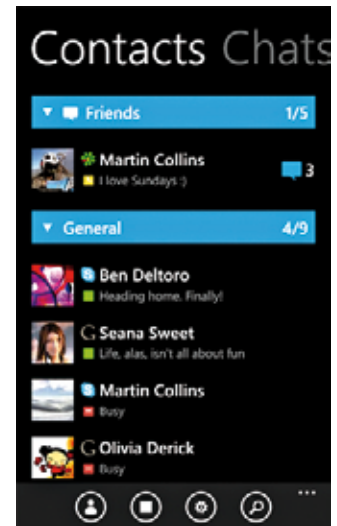
the movie for a call or lunge for the mouse when there's an explosion and your ears almost bleed. Of course we exaggerate, but we're pretty sure you get the idea. With PC remote you can essentially control your PC from your Phone. All you need is Wi-Fi and a server up and running on your machine.

**Rating: 4.5/5**

### eBay

The eBay app is one of the better designed apps on the Windows Phone platform. Using the application, shoppers can browse through 6 million listings in the electronics, lifestyle, collectible and media categories. One of the coolest features is the toaster notifications for items under bidding and watched items. The eBay Explorer feature is perfect for shopaholics who aren't really looking for something specific and want to window shop. The page by page browsing mechanism is pretty nifty. The barcode scan however doesn't work at all. It scans all right, but when we tried looking up a few products using their barcodes, none showed up any results. We suspect it tries to look up the Universal Product Code (UPC) number on eBay, but which seller would bother to feed it in. You'll have better luck with the default Bing "vision" barcode scanner than this app, but sans this small niggle overall the eBay app is a nice app to have handy.

**Rating: 3/5**



### IM+

OK let's get one thing out of the way at the outset - this is a bad app. Then why is it featured here? Because it's better than the rest of the free IM clients in the Windows Phone universe that let you use Gtalk on your phone. The app has all the standard features - pinning, tile notifications, toaster notifications, etc. - but you can enjoy them only if the app decides to work. It's not very dependable and signs you out at times. We'll be on the lookout for better clients. Until then, this app is your best bet.

**Rating: 2/5**

## Android

The Google Play Store has grown steadily and boasts of more than 5,00,000 apps, including games, productivity apps, social and news apps along with utilities to enhance your smartphone experience. This month we bring you some





## Facebook launches App Center

Facebook has officially launched app center for the users, which is now featuring 600+ social and gaming apps. <http://dgit.in/KeHrh8>

App Watch

of the hottest apps, all available on the Google Play Store.

### Flipboard

The much awaited social and news reader app, Flipboard debuted on Android this month, adding Google+ and YouTube integration to its list of supported networks, which includes



Twitter, Facebook and Google Reader. Flipboard brings together content from different sources, including your social networks, feeds

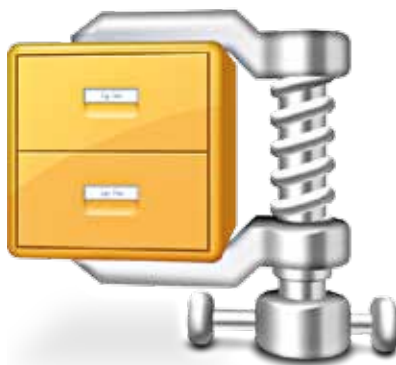
from Google Reader and high-quality curated content from the web, spanning categories like tech, art, design, news, etc. All this information is displayed in a gorgeous interface using large 'tiles' that lead up to the main article. Navigating through the app is done by simply 'flipping' these tiles over to reveal a different set of tiles. Flipboard can also be used as a full fledged social networking app, for not only does it integrate all your social networks under one roof, it also lets you post to different social networks and includes network-specific features such as replying, allowing you to 'retweet' or 'favourite' a tweet, 'like' or comment on a Facebook post, or share and '+1' posts on Google+. Flipboard comes pre-installed with the Samsung Galaxy S III, and is a free download on the Google Play Store for other Android devices.

Rating: 4.5/5

### Winzip

The de-facto standard in file-compression, WinZip made its mobile debut on iOS last month, and is now available as a free download for Android devices (running at least Android 2.1) as well. The app boasts quite a few features such as support for encrypted zip archives and the ability to view files in a variety of text and image formats within the app itself. The app also lets you open .doc, .xls and .pdf files in your default office app and supports third-party app integration.

Rating 3.5/5



### Speedmoto

This is a classic Roadrash-style bike racing game where the player controls the bike's direction by tilting the phone



on either side. Tapping the screen will cause the bike to accelerate. Speedmoto offers five different maps for players, with more

coming soon. This is free for download on the Play store for devices running Android 2.1 and up.

Rating: 4/5

### FolderSync

Foldersync is an app that syncs your files and folders between your phone's local storage and all of your cloud services with support for Dropbox, Box, Google Drive, SugarSync, Amazon Simple Storage Service, Ubuntu One, Samba/



CIFS, FTP and many more. It contains a built-in file manager that lets you conveniently move around files between the local (offline) storage

on your device as well as your various cloud services. You can also choose a folder and have it sync to the cloud, like Dropbox's desktop app. The full version costs ₹120, but there's a free, ad-supported version as well, which restricts the number of web services to just two. If you've got files strewn across various providers on the cloud, this might just be the app you need to organize all your files from one place.

Rating: 4/5



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**Avoid Internet Scams**

That is the infographic which gives the information about various scams and safety tips to avoid them.  
<http://dgit.in/LgJwSS>

**Why iOS 6 may fail?**

Lots of disappointment from iOS 6 first beta update. That is why it may fail!  
<http://dgit.in/Kvweh0>

## Flame & Stuxnet: World War Revised


Quick advances in cyber-warfare may soon lead to a new class of war with “cyber- weapons”. Security experts at Kaspersky Lab in Russia, during an investigation prompted by International Telecommunication Union discovered a new malicious program, Flame. The computer virus experts seem to think that it’s a government backed-program, because of the likely cost of such a sophisticated endeavour. Flame, which was actively used for cyber-espionage, was apparently targeted specifically at computers used in Iran, and other countries in the Middle East and North Africa.

According to experts, Flame can copy and steal data and audio files, turn on a computer microphone and record sounds in its proximity, take screen shots, read emails, and acquire passwords and logins. It can communicate with other computers in the vicinity via Bluetooth and locate their

whereabouts even without an Internet connection.


A previous malware known as Stuxnet, discovered in 2010 targeted computers in Natanz, Iran’s Uranium-enrichment facility. Experts from Kaspersky Lab said that there seems to be a link in both these malwares. Although they were developed and designated by two completely different groups, there is strong evidence that they shared source code of at least one module.

It’s widely believed that the United States, Israel or both were behind the development and deployment of Stuxnet. This time again the two nations have reportedly developed Flame to help slow Iran’s nuclear program.

At the cyber-security conference in Tel Aviv on June 6, 2012, Eugene Kaspersky, CEO of his namesake anti-virus company, condemned cyber-weapons and urged countries worldwide to work against it. He said, “Cyber boomerang may come back to you”. 

## India ranks 14th in PC protection

In the present scenario where cyber-crime is on the rise and every day a new virus is set loose to harm our computers, there is good news for Indians. According to a study conducted by security software firm McAfee, Indians are more aware about basic PC protection than Americans, Chinese and even Japanese. India ranks 14th with 82.67 of computers equipped with basic security software

solution, despite the fact that the country has low penetration of computers. The study estimates India had a total installed base of more than 60 million PCs by the end of 2011. Basic security protection includes anti-virus, anti-spyware and firewall technologies. Finland leads with 90.3 percent of its PCs wielding basic security protection, followed by Italy (86.2 percent) and Germany (85.55 percent). 

## LinkedIn hacked: Is your account safe?

In another such cyber-space infringement, about 6.5 million passwords of accounts on the social networking website LinkedIn were encrypted and posted on an online forum based in Russia. The file only contains passwords hashed using the SHA-1 algorithm

does not appear to be the case with these leaked passwords.

Vicente Silveira, director of LinkedIn said that they will add an additional layer of security to its accounts and members whose passwords were leaked will find their account password invalid. They will receive an email from LinkedIn with instructions on




without the corresponding email logins. An SHA-1 hash is an algorithm that converts your password into a unique set of numbers and letters. Often, random bits are added to a hash, known as ‘salting’, which greatly increases the time and efforts needed to crack the encrypted passwords. But that

how to set their passwords. The company said all passwords in the current database are now “salted”. They claim that there have been no reports of accounts compromised by password theft. However, LinkedIn is being sued for \$5 million by an Illinois based woman named Katie Szpyrka over the security breach. 

## Smart TVs to have anti-virus software

All the cyber threats that we are vulnerable to, they are no longer limited to computers with more and more electronic devices- smart-phones, tablets- thriving on the internet. Most new TVs and set-top boxes will soon be internet-

ready, support web surfing, download applications and run remote applications, exposing them to potential viruses and other malware. Ocean Blue Software and Sophos have joined hands to develop a cloud-based anti-virus software to defend your Smart TVs from this potential cyber threat. Such anti-virus software is also expected to bolster people’s confidence in e-commerce and other internet based transactions that require you to fill personal information. 







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### Dropbox unplugged

If you thought Dropbox was just for sharing stuff, take a look at all some of its lesser-known features

### Flexing your display

Get a lowdown on the latest wave of flexible display technology that's set to invade our digital lives

## Panasonic TH103PF10UK

Instead of mounting a TV on your wall, how about turning your complete wall into an HDTV? Well, Panasonic has done just that, with a full HD (1080p), 103" HDTV. Oh, and did we mention it's a 3D TV? This monster of a screen comes with four HDMI ports to connect all of your devices, including your cable set-top box, your gaming console and even your camcorder and boasts of a contrast ratio of 500,000:1. The downside? It comes with a price tag of around ₹33,60,000 and weighs about 221kg.



# The Lust that money can buy but is it **affordable?**



## Garia LSV

For those golf aficionados who don't want to let go of their golf carts, Garia has a solution in the form of the Garia LSV (Low Speed Vehicle), a street-legal golf cart / car. It's an electric ride with a top speed of 25kmph, but doesn't have any doors, so you can expect a few surprised looks when you take it out on the road. It comes with a few accessories like a windshield wiper, seatbelts, an optional fridge to refresh yourself after a tiring day at the golf course. Garia has priced it at around ₹7.2 lakhs.



## Angry Birds again!

Rovio is set to release "Angry Birds Heikki" named after the F1 driver Heikki Kovalainen  
<http://digit.in/K1Qzdt>



## New tech in Nokia Lumia

Nokia's Pure View tech will now be seen in the new Windows phones  
<http://digit.in/M211iw>

Drool maal

## Montblanc Collection Villeret 1858

Montblanc is a name synonymous with opulence and luxury, and not without reason. The Montblanc Collection Villeret 1858 is an effort by Montblanc to go back to its roots, back when sailors relied on well-constructed and highly accurate clocks for navigation. This limited edition series consists of two watches - a wristwatch with a regulator dial and two time zones along with a bigger, navigational clock that can display the time in three different time zones apart from the world time. Only sixteen such devices will ever be manufactured, eight in red gold and eight in white gold, priced at around ₹20.2 lakhs.



## Mophie Juice Pack Pro

If you're among the many who would rather die than see their precious iPhone wrecked beyond repair, look no further. The Mophie Juice Pack Pro is a rugged, military grade case for the iPhone with an extended 2500mAh battery thrown in. It comes with an integrated screen guard and watertight covers for all the ports - all packaged in a splash, shock, dust, drop and sand-proof case. Of course, it'll set you back by about \$130 and turn your iPhone into a thick, heavy and unsightly tank, but hey! Better be safe than sorry, right?

## Electrolux Crystal Egoripado

Cleanliness is next to godliness. But why settle for a regular vacuum cleaner when you can get one studded with Swarovski crystals? Three thousand, seven hundred and thirty Swarovski crystals, to be precise. Indeed, the crystal Egoripado is the world's most expensive home appliance, a cordless and lightweight vacuum cleaner priced at roughly ₹9.1 lakhs. Designed by Lukasz Jemiol, the bejewelled device was first unveiled at a fashion show and has even made its way into the Guinness Book of World Records!





### The Modai concept phone

Check out the gorgeous "modai" smartphone by Yanko design, with an interface to help you "bond" with the device. <http://dgit.in/Kx6p0Q>



### Galaxy S III Vs iPhone 4S

The next generation smartphones are now head to head. Which one is better? You decide! <http://dgit.in/MIhUgH>

# DO MORE THAN JUST DROPPING IN THE BOX!

Use Dropbox in ways that you never thought possible. Make your Dropbox experience even better by using it for running torrents remotely, saving your attachments and a lot more

Priyanka Mathur

[readersletters@thinkdigit.com](mailto:readersletters@thinkdigit.com)

**T**he advent of cloud computing has led to a shift in the web being used as an application, to being used as a data provisioning system. Dropbox is one of the most popular tools available today for online file saving and syncing, and is one of the first steps towards full-scale cloud computing. (True cloud computing implies that a computer consists of only I/O devices and an internet connection. Data storage and even processing happens server-side locally.)

Dropbox allows its users to store 2GB (or more) of data. You can access your data from any device connected to the internet, using the Dropbox clients for Windows, Mac OS X, Linux and even the mobile clients for iOS, Android and Blackberry

phones. Here we're going to tell you what you don't already know about Dropbox.

### Backup your Email:

- As an alternative to the Dropbox clients, you can also email your stuff directly to your Dropbox. Just get your unique email address from [www.sendtodropbox.com](http://www.sendtodropbox.com), by connecting your Dropbox account with it and forward your emails to that ID. The emails (attachments and/or text) will now be automatically available in your Attachments folder of Dropbox. It also provides you other features like automatic archive unzipping and plain text or html message copying.
- Another such tool is MailDrop. It checks your email account via IMAP, and any email attachments in the specified folder (or label in Gmail) are then directly saved to your

Dropbox. This way you would've automated the process of grabbing attachments from your mail.

- Alternatively you can use the attachments.me chrome extension to save attachments from your Gmail account directly to your Dropbox. Whenever you open an email with attachments, a toolbar appears on the right hand side of the browser window which lets you save the attachments directly to your Dropbox by clicking on 'Save to Cloud'. iPhone users can download attachments.me on their devices to automatically save email attachments to Dropbox.

### Share with URL:

- No more attachments! Send your friends the link to the file you wish to share. Dropbox lets you create links for any files or folders, and these links can be sent to anyone for viewing your videos, images and documents. Disable the links whenever you're done with them.
- What about when someone wants to send you a huge file, but cannot because of the size limitations?! *DROPitTome* comes to your rescue. It's an online application that lets you create a password protected link, where you and your friends can upload files. Let your friends drop stuff in your Dropbox from anywhere.
- Another web app called URL Droplet lets you paste the download link for a file and have it downloaded right in your Dropbox, so you can carry on the download from your phone or the computer at your office. Convenience at its best!

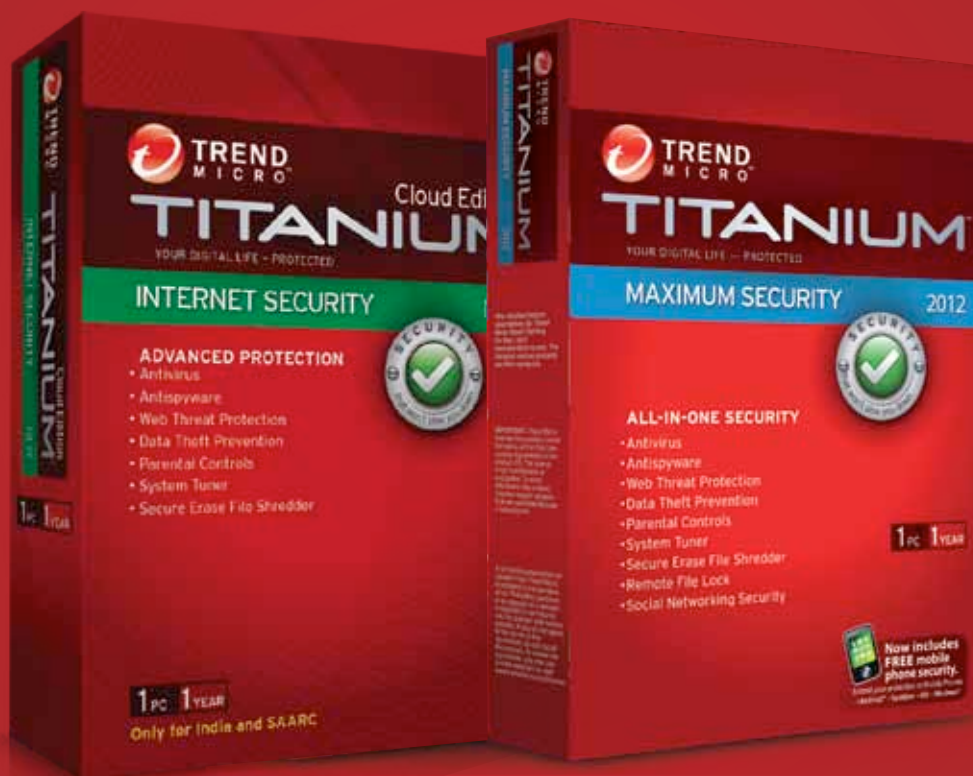


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## Microsoft's tablet adventures

Microsoft to compete with iPad with Surface, a tablet based on the upcoming Windows 8.  
<http://dgit.in/KjYPkH>

## Siri Vs Aisha

Check out thinkdigit's coverage of Siri v/s Aisha shootout. The results may surprise you.  
<http://dgit.in/MIPXL2>

## Programmed saving to Dropbox:

- If you're uncomfortable with saving documents in two places at once or having to change the default save location to your Dropbox folder, Mac OS X and Linux-based systems let you create symbolic links to ease your problem. In essence, your files are stored at one fixed place (preferably your Dropbox folder) and you create links to the same file or folder elsewhere on your hard disk. For example, if you have a bunch of important documents stored in your home folder under ~/Documents and your Dropbox folder is located at ~/Dropbox, start by moving your Documents folder to inside Dropbox:  
`mv -r ~/Documents ~/Dropbox`  
 Next, create a symbolic link to your Documents folder (now located within your Dropbox folder) to its earlier (original) location:  
`ln -s ~/Dropbox/Documents ~/Documents`

You can now continue to save files to your original Documents folder and Dropbox will sync your files for you! (<http://dgit.in/KNEHZu>)

- If your existing Dropbox folder is a mess, Sort My Box is a nifty little service that organizes your files for you, based on rules that you define. You can choose to organize files by extension, date or filename. Put all your unsorted files into your SortBox folder inside your Dropbox folder, and Sort My Box will automatically move the files into the appropriate folder for you.

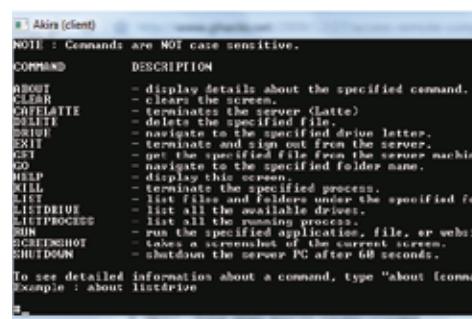
## Remote Access:

- Akira (<http://dgit.in/KGSZtf>) is a command prompt application which uses Dropbox to access a computer remotely. It requires two Windows computers—one running a server process (Latte) and another issuing commands through a command line client (Akira). You can grab files from anywhere on the remote computer, take a screenshot of the screen and save it in your Dropbox folder, run applications, shut down the PC, or even launch a web site in the default browser.



URL Droplet

- Configure your BitTorrent/uTorrent client to monitor a Dropbox folder and immediately initiate downloads when a new .torrent file is added to it. (Those using uTorrent's remote feature will find it redundant, but it's a simpler application.) You can copy a torrent file to that folder from any other device to initiate the download. Make sure your client is configured to save those downloads somewhere other than Dropbox, considering memory limitations. Start the torrent from anywhere and when you reach home, you can enjoy your content straightaway.
- Basically, any application that lets you create a watch folder is fertile ground for Dropbox. Be it Adobe Photoshop, or Handbrake, you can automate their functioning by configuring them to watch a folder in Dropbox. This way you can run processes on your mother ship, while being away from home.



Akira, if you want to go the geeky way

- Set-up remote printing using Dropbox. You can print from any device connected to the internet. Make a folder in Dropbox and run a VBS script on the printer-connected computer at your home to monitor that folder. Now send any file you want printed to that folder. You can find the script at Digital Inspiration (<http://dgit.in/LD6CiD>).

## And so much more:

Get more out of the box. Use the inherent features of Dropbox to do more than usual.

- It automatically syncs your media files when you connect a camera or a smartphone to your computer via USB. You can also choose to auto-upload all your camera pics to your Dropbox automatically (Doing so can get you an extra 3 GB of free space!)
  - Web developers can store "local" copies of files they're working with on live servers in a Dropbox folder. As you edit those files from other locations/devices, they'll synchronize, so you'll always have current copies to work on.
  - Now you needn't worry about adding new songs to your iPhone via a data cable. In iTunes, go to iTunes Preferences > Advanced tab. Select the location of your Dropbox folder as the iTunes Media Folder Location. Just add the new media files to your Dropbox folder, and iTunes will automatically sync them to your iDevice. (You shouldn't sync the iTunes Music Library.xml file; doing so can reportedly make iTunes unstable.)
  - Put your saved game data in Dropbox for complete portability. Then, no matter what computer you're on (as long as you have the game installed), you can resume your game anytime.
    - Many IM clients let you designate a path to save your chat log. Clients such as Pidgin can be modified to save your chats within the Dropbox. Now no matter what computer you're using to chat with your friend, you can pick up where you left off.
    - Set up a future-proof productivity and personal organizer using plain text files and Dropbox. Plain text files are OS agnostic, and productivity tools like Todo.txt let you manage your tasks in a plain text format that syncs between your desktop and mobile phone using its apps for iOS and Android, all using Dropbox.
- And the list is endless. These little tips will help you customise your Dropbox experience and amend its functionality. Try them all, and write to us with your queries and comments.



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- > Matrimony
- > Image handling websites etc..

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Letusfree Home page



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Graphene can lift a 4-kg cat on its 1-metre-square of its hypothetical area while weighing just 0.77 milligrams

**What is graphene?**

Think graphene can be used only in touchscreens? Have a look at this <http://dgit.in/J9v4XW>

# FLEX YOUR DISPLAY

By all estimates, 2012 will witness the first wave of devices with flexible touchscreens. We take a close look at the technology

Hardik Kotecha

*readersletters@thinkdigit.com*

It's been a while since Nokia's concept phone Morph teased our imagination on how the future of flexible displays and touchscreens would look like. Seemingly getting closer to their aim of flexing displays, they demonstrated their Kinetic Device at Nokia World 11 (<http://dgit.in/KamCEt>). It used flex-to-operate technology to browse through photos and music. Many other manufacturers, such as Samsung too showcased their innovations at CES 2011 wherein a curved S-shaped structure lit like an AMOLED display. Not only that, one could literally bend and fiddle with these displays that were as thin as human hair. But the real question is, are these display technologies going to replace the current ones anytime soon or are they only good enough for expos and sci-fi movies? Let's try to find out.

## The story so far...

Most breakthroughs in technology have their roots in the development of material science. In the case of flexible touchscreens, the credit goes to a carbon allotrope known as graphene. So far, indium tin oxide (ITO) has firmly established itself as the most important ingredient in the touch screen market. This hard and brittle substance is scarce and becoming increasingly expensive. In the past six years, the price of this compound has shot up from \$100/kg to around \$1000/kg. The advent of graphene and the continuous development of the methods for its mass production might well change the way our next touchscreen phone fits in our pocket. Graphene is a single-atom thin sheet of carbon, which makes anything made out of it light and flexible. It's also



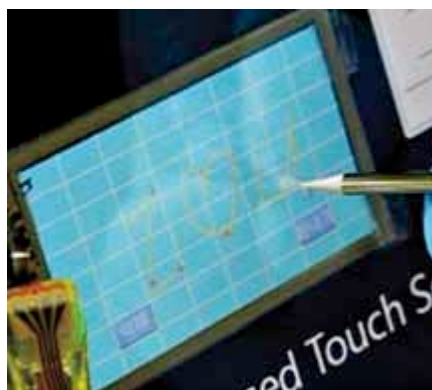
Atmel's XSense on an edgeless tablet

strong and highly conductive – qualities a researcher would ideally want. Surely there have been hurdles in its mass production since its discovery 40 years ago. Initially, graphene was too conductive to be used as an electrode. Attempts on producing large sheets of graphene, resulted in a change in its flexible and conductive properties. This in turn adversely affected the display quality when used to create touch screen. It created dead pixels which are a bane in display technology. Also, it was difficult to churn out single-

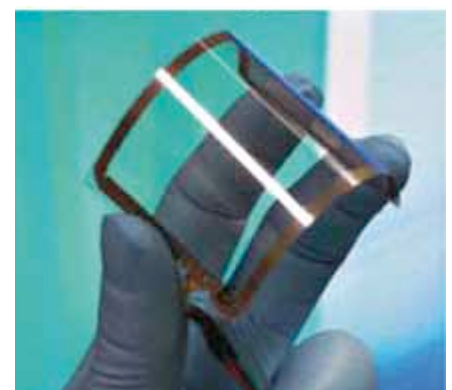
layers of large graphene sheets without damaging it. All these factors hindered the mass production of graphene so far. Clearly, its time hadn't come.

## Why now?

The mainstream research for mass production of graphene gained momentum after 2004 when nobel laureates Andre Geim and Kostya Novoselov from the University of Manchester, UK, first suggested using adhesive tape to peel thin layers of graphene from lumps of graphite



Graphene sheet with silver electrode printed on it



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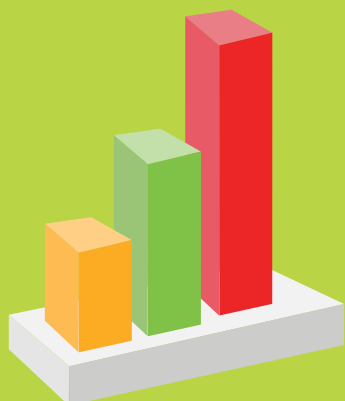
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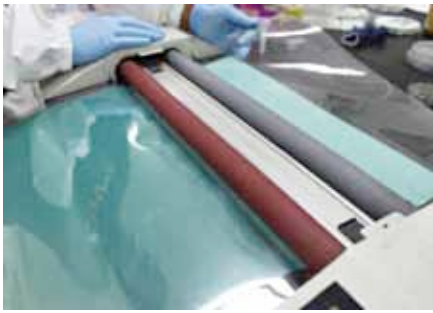


## Flexi-displays at CES '11

A hands-on preview of the Samsung OLED flexible display that was showcased at CES last year.  
<http://dgit.in/JJS26b>

## What the future holds

A sneak peak at what our future will look like in terms of innovative display technology.  
<http://dgit.in/Kag9Jy>



Graphene transferred on polyester sheet

after several rounds of exfoliation. Since then, the methods are only getting better and profitable as scientists are continuously trying to move from lab-scale to industrial-scale production. Researchers at Samsung and Sungkyunkwan University, in Korea, have successfully produced a 63 square cm graphene sheet. They grew a graphene layer on copper foil using chemical vapor deposition (CVD) and then passed the copper foil with graphene, attached to an adhesive polymer support, through a roller dipped in copper etchant. What remained was graphene stuck on flexible polymer support.

The size of the sheet was quite a boost. Once the sheets are rolled out, they are pressed and passed again through a final substrate, in this case, polyethylene terephthalate (PET). When treated by doping with nitric acid, these sheets act as transparent, flexible electrodes which can be used instead of indium tin oxide electrodes.

Once the electrodes used in touchscreens become flexible, it will not be too hard for manufacturers to make an entire device flexible. All they would need is a flexible base, like for instance foldable plastic, to mount sensors on. Not being brittle is also one of its key features that is attracting researchers. This would provide consumers with more durable and thus, long lasting products. Phones and tablets will be able to withstand more strain and pressure. Since graphene can be produced using recyclable copper substrates and easily available resources, it would further bring down the cost of final gadgetry. Combined with its ability to consume minimal power, these screens will be nothing shy of being miracu-

lous. All that is left now is for researchers to tap these capabilities to the maximum and bring it into mainstream market as soon as possible.

### Current scenario

Companies all over the world have realised the benefits flexible touchscreens offer and are in a race to successfully monetize them. Leading this race at the moment is Atmel. It's been powering touchscreens on popular Galaxy devices like the Galaxy Tab and the Galaxy Note series. The company has recently showcased its curved touchscreen sensors known as XSense (here's a video <http://dgit.in/KRQh7L>). Samsung is hoping to introduce this innovation first in the market. It's already rumoured that Atmel's touch sensors' production quantities will be available in the third quarter of 2012. And it's not hard to imagine Galaxy S4 as a thinner, lighter and yes, a flexible phone.



Nokia kinetic device

Nokia is already in the competition with its Kinetic device, (not a touchscreen, but a flexible display nonetheless).

LG too, since its announcement of electronic paper display (EPD) is looking forward to flexible touchscreen smartphones and tablets. And considering that Apple has always been secretive about their innovations, we won't be surprised if they decide to hop on the wagon soon. Who knows the upcoming iPhone may blow the competition away with a flexible phone?


### Applications

Tablets and smartphones are just a part of the big picture. When the structural constraints for using touchscreens are overcome, it may find applications in almost every field possible. Since it is low cost, we can expect the products to be cheaper and pocket friendly. The scope of flexible touchscreen depends on your imagination. It can replace paper in most applications. A calendar which is capable of storing your to-do list, or a newspaper which will update itself everyday keeping up with the latest news so that we don't have to give up our age old habit of reading from 'paper'. We can mount a flexible touchscreen on closets at our home or at shopping malls to scroll through outfits to see which suits us best.

Graphene also has the potential to replace glass in applications like test tubes and sunglasses. For instance, a test tube will be able to display the contents of the solutions inside it and enable us to monitor them. On a broader sense, we can practically use the technology pretty much everywhere.

Also, the coolness quotient cannot be ignored by the manufacturers in the applications area. Imagine an iPhone which rolls into a wrist watch. These fancy items, which we gaped in awe at in Hollywood flicks and Youtube videos, would certainly become an important factor of competition amongst companies trying to gain an upper hand in the market. With each one trying to outdo the other in terms of efficiency and design, it's a great time to be a technology consumer right now.

If flexible touchscreens were not enough, graphene has also found its applications in tapping solar power. You can charge your phone or tablet by taking it outdoors during the day. That solar-charging app which trolled Android users can become a reality. Though a distant concept, it isn't an impossible one.

Once the ice cream has been whipped and sandwich enjoyed, the focus is bound to shift to display hardware and flexing your touchscreens is surely one good way to go about it. 

REASON

2

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**Rehab? Enter Wiihab!**

Using gaming technology in healing. Read how game consoles, particularly the Wii, is being used as a therapeutic tool

**Nintendo's new Gamepad**

Nintendo unveils a new tablet computer sporting a 6.2 inch touchscreen Wii U gamepad <http://dgit.in/L1qnxz>

# God is a programmer

**We might be living in the most elegantly coded virtual reality ever - the Universe itself!**

Abhishek Choudhary  
[readersletters@thinkdigit.com](mailto:readersletters@thinkdigit.com)

There comes a time in a man's life when he feels that his life is building up to something. Everything around him seems to be plotting a path that his life will take. When this realisation dawns, he feels a strange unrest about him - a feeling that someone, somewhere is observing him, that somebody has told the Universe his plan for the man and there is nothing he can do about it. We all have our "Truman moments", sometime or the other. In Douglas Adams' historic masterpiece, *The Hitchhikers' Guide to The Galaxy*, Arthur Dent always felt an 'unaccountable feeling in his bones that something sinister was going on in the Universe, but no one would tell him about it'. That was also the feeling Keanu Reeves portrayed brilliantly in the movie franchise *The Matrix*. As it turns out, it might well have been a documentary - someone probably has told the Universe his plan for each one of us, and it's not God that we're talking about here. It might be a programmer of a higher level. You read that right.

## How this came to be discovered

Recently, a scientist at the University of Maryland claimed to have found computer codes embedded into the equations of string theory. Now, string theory is what researchers have their hopes pinned on, to be proved as the elusive "Theory of Everything", and indeed it has the most valid claim for being exactly that. The problem was that until recently, it had been a circular logic - a set of equations and assumptions, where everything

bases its own existence on the other, and the entire system exists as a mutually dependent framework. The drawback was that this framework could never be proven to be, in any way, related to our own, real world. That it describes many phenomena very accurately is mostly because it was designed to do exactly that - be the theory of everything, in *this* world. In fact, this has been one of the most persistent criticisms of the theory - that no situation could ever be imagined that would ever prove (or even disprove) the idea. That was until physicists at Imperial College London had a flash of imagina-



**Dr. Sylvester James Gates**

Dr. Sylvester James Gates is an American theoretical physicist whose research fields include Syperymmetry, Supergravity, and Superstring Theory. Along with being a senior professor at the University of Maryland, he serves on the America President's Council for Advisors on Science and Technology

tion, and basically proved the existence of string theory in the universe, albeit in a context very different to the one it was being applied to. They saw that the kind of mathematical application that string theory puts forward for the explanation of black holes is very similar to the one that was being used to explain certain quantum systems, called Qubits. Thus, when applied to a field that is more related to high speed data transfer than being the explanation to everything, string theory came out with flying colours. By the alleged symmetry in nature, it was only logical that this gave a ray of hope to physicists that string theory may actually

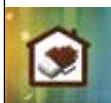
have a proof after all. Research work in this field received unprecedented impetus. One of the researchers, Dr. Sylvester Gates, approached the task at hand with a different methodology. By his own admission, he is not a big fan of using long, scary equations in physics. Instead, he and his fellow researchers made use of graphical representations called 'Adinkras', which essentially put out a pictorial relation between the elements of the equation. And when this method was applied to the equations of string theory, something strange was observed. The equations seemed to have codes built into them. Not just any code, specific computer codes. And not just any normal computer code - they contained a special kind of code, known as the "Doubly-even self-dual linear binary error-correcting block code" (these are not as far removed from us as they sound - they are built into all of our modern Internet browsers). These are essentially codes that make sure that data doesn't undergo corruption during its transmission from point A to B. And it's now known that they are built into the very fabric of our universe too (that is, assuming string theory correctly describes the fabric of our universe). Read more in the essay 'Symbols of Power' at <http://dgit.in/symbolsofpower>. Read Dr. Gates' research paper at <http://dgit.in/drgatespaper>.

## ANTHROPIC PRINCIPLE

Anthropic Principle states that a universe must be compatible with the conscious life form that observes it. That means, we observe the universe this way, because this was how it needed to be in order for us to be there and observe it. It is like saying that everything has been finetuned for our existence. One of the most compelling of arguments by theists about the existence of God; it can just as easily support the possibility of there being a 'mythological' programmer instead. A common retort is that just as a monkey could type a Shakespearean sonnet if given enough time, similarly the universe would've stumbled upon one or the other life sustaining condition, given sufficient entropy.

## Notepad for your browser

Ever felt the need to quickly write something down while surfing the web? Head over to [notepad.cc](http://notepad.cc) <http://dgit.in/LAkgPZ>



## Holo Launcher for Android

Desperate for some ICS goodness? The Holo Launcher can bring most of those features to your Android device <http://dgit.in/LauBTN>

Feature

## What this means

Now that the facts have been established, we must get down to analysing what we know. We now know that our most trusted candidate to be the Theory of Everything, the string theory (in its most recent avatar, the M-theory), contains embedded computer codes. While the discovery does seem remarkable in itself, its implications are the ones that steal the show. One can conclude from this infor-

### QUBITS

Qubits, representing a unit of Quantum information, differ from a regular bit in that they can be a superposition of its two possible states at the same time – a property fundamental to Quantum Computing.

mation that all the laws of the universe that we observe around us might not have been borne out of evolution of the universe – they might have been fed to a virtual system. That any or all ‘natural foundations’ that we come across are not there as real ‘laws’ – they are rather restrictions that have been applied to the program to stop it from entering into an erroneous state. Stretch your imagination a bit, and you’ll realise that what we are essentially concluding here is that none of what we thought to be our world is really true – that we are living in a computerised projection, and that our real selves, if we have any real selves at all, might be locked away in some cellar, being fed to advanced machine forms. All of our feelings are not borne out of our own

elves, but out of some digital dispatch that gives it to us as a stimulus because of what is happening in this virtual reality that we call the universe... the possibilities are endless. Such a discovery would also throw both the creationist and the evolutionist theories for a toss – because essentially, we neither arrived nor evolved. The universe is a coded program, and all of the phenomena around us are based on sets of rules applied to it, not by nature, but by a programmer of a higher kind. Either that or we, in our pursuit of understanding of the evolution of the universe, have been recreating the basic nature of what we call God.

## Reasons to believe

This belief actually has a lot going for it. Sound scientific base? – check. Fantastic to ponder? – check. Groundbreaking? – it’s probably difficult to break much more ground. Almost everything is in place to establish the certainty of the facts, except for what has become the Holy Grail for modern physicists – proving string theory once and for all. In the end, current testing methods will only take it so far – one would have to take a leap of faith. What is there to know is before you, and you decide what to make of it.

## Reasons to doubt

If a sudden feeling of hopelessness is dawning over you, do not worry – not yet, anyway. As with everything else in life, this theory does come with its fair share of loopholes. ‘So what are the loopholes

## STRING THEORY

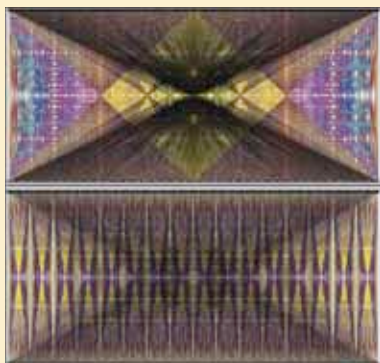
String theory is an(other) attempt to reconcile between the two theories aiming for galactic supremacy [read: Unified Theory of Everything]. One of them is Einstein’s famous Theory of Relativity; while the other is the Quantum Theory, which can, for entirely poetic reasons, be considered Einstein’s love child (many others were heavily involved – pun intended). While the Theory of Relativity predicts the behaviour of matter on a macro scale, the Quantum Theory dictates the effects at the subatomic level. The dream is to create a middle ground between these two, and somehow include gravity into the mix. String Theory promises to do that, provided that we give it unwavering faith and hence not ask for proof, along with giving leeway for a few extra dimensions (11 was the most recent demand).

here?’, you might ask. Many, actually. First up, string theory has, in the required avatar, still not been proven. If one day it is irrefutably proven to be true, then the successive pieces would fall into places like dominoes. But then there is the trivial issue that the entire scientific framework of our knowledge might not be exclusively true. The Anthropic Principle has been doing the rounds for some time now – and it essentially says that the framework of laws that we formulate is what it is because we observe it. General suspicion is that another intelligent race, if it were to ever exist in surroundings similar to us, might formulate an entirely different set of laws, which would explain our world with similar accuracy but with radically different means to do so. By extension, they might reach another ‘Unified Theory’ altogether (but who is to say that their theory won’t have any embedded codes?).

## How this affects you

How does this not? It changes everything! Everything around us, everything we know, is a part of an enormous computer program. Everything that you have, and everything everyone else does, is immaterial, because it is really non-existent. That practically leaves the world as a stage, its contents as props, with us as actors, who enter and leave at the will of a higher power. Shakespeare had it right all along...

## ADINKRAS



A modern Adinkra - represents the multidimensional representation of super differential equations



An ancient Adinkra - represents the ancient thought "He who does not know can become knowledgeable through learning"



### Sony SmartWatch

The Sony SmartWatch features an easy-to-use, ultra-responsive touch display.  
<http://dgit.in/OPFR9a>



### Chrome OS updates

The Chrome team updated Chrome OS for Chromebooks and the Chromebox recently.  
<http://dgit.in/LR40xt>

# Move over Rehab, Welcome to Wiihab!

We take a look at how regular gaming consoles, particularly the Wii, are finding a foothold in occupational therapy

Nimish Sawant

[nimish.sawant@thinkdigit.com](mailto:nimish.sawant@thinkdigit.com)

If you are given two choices – doing physical exercises or playing a gesture-based game which incorporates these same exercises – what would you choose? We asked this question to Team Digit, and the reply was unanimous – play the gesture-based game. Not only is the prospect of gaming exciting, but you are having fun while doing the exercise, to an extent where you completely forget the exercise part and concentrate more on completing the game.

Game Therapy is the discipline which incorporates regular games in the form of therapy. While it is being practised globally, in India it is still in its infancy. Though games can take many forms, we are primarily concerned with gesture-based games in general and the games using the Nintendo Wii in particular.



Elderly patients at a US hospital engaging in Wii gaming as part of therapy

help of the Nintendo Wii and its accessories, to assist in recovery of patients suffering from neurological or orthopaedic disorders. "Since Wii activities require both physical actions as well as cognitive

processes, the Wii can be used as a therapeutic tool to address most problems seen in rehab. A therapist may use Wii Tennis to help someone improve range of motion in the shoulder, use Wii Boxing to help someone

with Parkinson's disease increase their ability to move more rhythmically or use Wii Pose Me to improve critical thinking skills," says Dr. Mershon Hinkel, who has been an Occupational Therapist in the US for close to 25 years and conducts a workshop named *Using Nintendo Wii in a Therapeutic Setting* to educate OTs in using

Wii as an assistant to regular therapy. It's a big trend in the US, seemingly enough. The WiiFit Balance board received a lot of positive press when it launched back in 2008 and for good reason. Generally, gamers are known for being couch potatoes, but the whole idea of WiiFit is to make these gamers forget the controller and use their whole body while balancing on a board which communicates with the Wii console. The WiiFit comes with a range of games such as Yoga, Table Tilt and Skiing, which are fun ways to use your body to play the game. The graphics, game score and the competitive edge, keep the patient motivated to continue playing the game. Apart from the WiiFit, the Wii console itself has a range of sports games such as Wii Baseball, Wii tennis, etc., which involves physical movements that the player would do while actually playing the sport. For patients wanting to improve muscle co-ordination and muscle strength, these games are a great alternative to mere exercises. There have



"A therapist may use Wii Tennis to help someone improve range of motion in the shoulder, use Wii Boxing to help someone with Parkinson's disease increase their ability to move more rhythmically or use Wii Pose Me (WII PLAY) to improve critical thinking skills"  
 - Dr. Mershon Hinkel

## Goodbye Rehab; Hello Wiihab

Occupational Therapy (OT) is a branch of therapy concerned with promoting health and well-being through engagement in occupation. Wiihab is a blanket term used to describe the abundant use of interactive gesture-based games, primarily with the



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## Cellphones under review

The Federal Communications Commission wants to reopen an inquiry on harmful radiation from cellphones. <http://dgit.in/N9F2sM>



## HTC One S is available online

The Android 4.0 ICS-based HTC One S is available on Indian online retailers' sites and available at ₹33,000. <http://dgit.in/LwGR0I>

been exhaustive studies in the US which have given a green signal to the use of Wii console in therapy.

For patients suffering from ailments, it is best to conduct Wii exercises under the guidance of a trained professional. "Individuals who choose to play the Wii at home may experience benefits similar to people who begin a walking program or start practicing Yoga. But for specific problems it is always best to seek a professional who can perform a comprehensive evaluation and teach the client the proper ways to utilize the specific activities to not only maximize benefit but also avoid injury," said Hinkel.

These Wii games are used across age groups. Exact figures are not available, but many therapists are making elderly patients use the Wii in therapy. We asked Dr. Hinkel how responsive such patients are to technology. "The older population in the US seems quick to embrace the Wii because they are familiar with computer games through their children and grandchildren." In fact we were told that a group of patients in one of her community care centres hold regular Wii bowling competitions.

With gaming comes the inherent motivation to get the highest score, sometimes causing one to spend hours playing a game. Now regular gaming where you are just stressing your thumbs and fingers is fine for long hours, but addiction and long hours playing a Wii game can lead to joint aches – which is disastrous for patients.

vision when starting activities geared at helping the issue," advised Dr. Herkel. *Quick read: <http://dgit.in/MX4IbR>*

## India report

As we have seen above, using Wii for therapy is quite prevalent in the US. But the practice still hasn't gained popularity on Indian shores – maybe because we don't take gaming seriously? A quick search reveals fairly little data about the use of Wii for therapy. That's because there aren't any mainstream Indian hospitals incorporating Wiihab in their medical setup.

"Use of gaming as an adjunct to meet the therapeutic goals is unfortunately not practised in general at any rehabilitation centres or clinics for children or adults. While neuro-feedback and bio-feedback are topics covered in the curriculum of Occupational Therapy, use of Wii or PlayStation or Xbox is yet to gain popularity as a therapeutic activity for individuals having special needs," said Dr. Saif Bijliwala, Psychiatric Occupational Therapist and CEO of Jump Start Therapy Centre in Mumbai,

which is one of those rare places which actively pursues game therapy.

Jump Start Therapy centre started in 2008 and has been using game therapy since then. "Our clients are generally toddlers, children and adults who have


developmental handicapping conditions such as autism and related disorders, cerebral palsy, etc. Since one can develop many skills of clients, with these challenges, most parents who can afford



A child playing a game on EyeToy to improve reflexes and muscle strength at the Jumpstart Therapy Centre in Mumbai

Wii consoles generally buy it and use them at home," he said.

According to Dr. Bijliwala, one of the main reasons for Wiihab not picking up in India is the cost factor. "The cost of Wii is perceived as high. Adding WiiFit or dance mats is additional cost. Surprisingly clinics and even institutes for training professionals do not have gaming consoles," he said. Additionally, lack of awareness among the general public that a gaming device may help in recovery is a major deterrent.

Dr. Bijliwala also incorporates other gaming accessories such as the Eye Toy for PlayStation 2. The Eye Toy is basically a webcam-like device and captures the player on the TV and then the maps the players gestures within the game. According to him, most of the games that he uses with Eye Toy are regular games to be played on the touchscreen monitor, and were not designed specifically for therapy. There are, however, aspects of these games that stimulate specific areas of the brain. "Playing some of these games involves use of a lot of cognitive processes, which we can use to help our patients. Based on the condition of the patient we determine which games to use with them," he said. Hopefully we will see the Wiihab therapy adoption among Indian occupational therapists in the near future, as let's face it – who does not want to play a good game and get fit along the way – all within the comfort of your home. 



"In India, while neuro-feed back and bio-feedback are topics covered in the curriculum of Occupational Therapy, use of Wii or PlayStation or Xbox is yet to gain popularity as a therapeutic activity for individuals having special needs."  
- Dr. Saif Bijliwala

"Therapists are well aware of the possibility of overuse and are skilled at grading programs to help prevent such occurrences. If an individual has an orthopedic issue, it is best to seek professional super-



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Procrastinators, distracted souls, and anyone who is pro-convenience! This cover story is just for you. Say goodbye to tedious, repetitive tasks and automate everything

Abhishek Choudhary,  
Mithun Mohandas,  
Paanini Navilekar,  
Priyanka Mathur  
[readersletters@thinkdigit.com](mailto:readersletters@thinkdigit.com)

Some say necessity is the mother of invention. “Utter bollocks”, as the English put it. The only way we would agree with that statement if they agree to include the fact that it is laziness, if fact, that is the mother of necessity. Cavemen used to live too, didn't they? And

happily too, one would assume. For as far as any man claims to know, mankind has been going all out at developing new technologies, with the sole purpose of making our lives simpler. Ever since men in caves thought of rubbing two stones together to produce fiery sparks, we have taken one road to progression after another, and have established ourselves as the prime species on the planet. Whether that was a necessity is debatable, but it certainly happened as a by-product in our quest to

make our surroundings better, and more comfortable. ‘Comfortable’ – just another word for easy. So, in essence, we made such amazing progress because some of us just couldn't live with the amount of work that we had to do to get by. Amazing thought, isn't it? The world obviously condones lazy behaviour, because, deep down, we all do, too. We ourselves aren't so much members of the lazy brigade as we are pro-convenience, and this month, we thought that we would do share our insights. So,

here is our treat to all our procrastinating brethren out there, we present to you our view (and guide) to how life should be.

We want that we should have to do as little as possible to get by. But, that should not take any of our luxury away from us. Making other people do it for us would be just mean. So why not make stuff do itself? Why not have all the tasks that you have to do on a device, be done by the device itself? We want that none of our slaves (read: equipment/devices) should get a moment's peace. They should work through the day, and then continue to do so for the night, so that we don't have to worry about them, day or night. We want that none of the tasks that you have to do are tedious, and that you aren't bored by whatever little that you have to do – mainly because you are pumped by the power that you have in your hands with making so much of machinery work for your end. Before our wishlist spins out of control and you start wondering if you've wasted time reading this, we must give you a sneak-peak into our vision for the future. And that future is not a distant one but much of it you can attain just by reading the next couple of pages. So, picture this...

"You wake up to the sound of an alarm, which was set up in your phone last night, but it's not the phone ring that wakes you, the sound comes from your iPod Dock. The phone conveyed, at the desired moment, the signal to the dock to ring the alarm. Your 'all-purpose' tablet is already loaded with your tasks to do today, along with your favourite newspaper reader app already opened. Read it if you want, or if you're too sleepy to do that, it can read news out to you – just say the word. Really, just say the word, and your digital assistant springs into action. These days, it's just one iteration of a personal assistant, who's there for you, the same on every device. It knows all of your interactions with all of your devices, and is equipped with not just command-following skills, but also cognitive ability, i.e., it can now understand you and do some repetitive tasks by itself. While the news is being read to you, somewhere along the way, a signal is sent to the coffee machine to prepare a steaming cup for you, by the time you get to the kitchen. We

all dream of having some background score to our lives, and now it is a reality. The sensors in your tablet or wearable sensors will judge your mood once you wake up from bed, and play music from some radio streaming service accordingly. Well this last bit was a vision of the future once it catches up but what about simple things on your devices that can be automated right now?



Let your machines do the grunt work

The wallpapers on all of your computer devices are altered as per the forecasted weather for the day, giving you an idea of what to expect. Simple Rainmeter (with some scripts) has picked up cloudy wallpapers and is silently cycling through them. When you reach your computer, you find that all of your requested files from last day have been downloaded and arranged properly in the organised haven that is your computer. All of your previous files have been backed up, both to a local drive and to the cloud. You get up to bathe, and get ready, to find your car ready and waiting for you. The streaming of the music continues, because the machines recognise your location and presence. As you drive out, thanks to new technologies such as {on X} your phone is already in the

GPS profile – landscape orientation, mapping application on, ready to be docked. It's already charted the best route as per the known traffic info. When you reach office, automation apps in your phone have already recognised the familiar tower and gone into the Work Profile. At your computer desk things software such as Evernote and Catch have synced the to-do list that you jotted down on your tablet while having breakfast. Your tasks for the day have been laid out on your computer's screen. All your required applications are ready for your use, every step of the way, and anything that is out of order can be corrected by simple conversations with the system.

Any new developments that require your attention will be sent to you directly, by analysing your location – to your computer if you're there, or to your Pebble watch, which is also in on the action. Finish your day, and set your target location in your car – your pub, or a friend's place, or don't say anything and the car will take you home. Have your meal, and lay down, relax. Your preferred tracks are playing again, if you want them to. If you suddenly remember something important, sync it to your 'to-do list', and it's added to your tasks for tomorrow (or whenever else you want it to be). Relax with your favourite movie or TV show, which your computer downloaded for you while you were away. Satisfied with yourself and your world, you go to sleep. Then you wake up again..."

This has been a dream in the pipeline for many years, because apparently we are not the only 'workophobics' out there. And cheers to those people, for they have brought this pipeline dream very, very close to reality. Enough with the drumroll, we should now get started with the details of what exactly we're talking about here. For remember, if you want to save hours of your time sorting, copying, converting, downloading and doing so many mundane tasks, you need to spend some of it to actually set the ball rolling. The workshops in the following pages will require time no doubt to implement, but only once. So go ahead, we want you to experience what we've just described here. Go forth, young 'un, spoil yourself...

REASON  
3

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# PC Automation unleash the true power of your desktop

We end up doing so many mundane repetitive tasks on a daily basis, here we show you how to automate them

## Windows

Windows doesn't have too many in built features for automation but in terms of external applications, there are a few options available. First up, there is the provider for your networking needs – NetSetMan. All of us have our own preferences, when it comes to our network profiles, and if you want more control over them than Windows' network location manager is ready to give you, then NetSetMan is, well, your man. It lets you define upto 6 network profiles (or more, if are willing to pay) – and set every network-related preference, from basic 'network type' to the more advanced printer preferences, mail servers, among other things. Nifty stuff. Get NetSetMan at <http://dgit.in/NetSet>.

Next, we take a look at disk-management tools. While hard drives should ideally last for at least 5-6 years, it is our continuing digital dependency that causes many of us to fret over the every thought of losing data. It is for this purpose that 'set-it-forget-it' software like 'CrashPlan' exist. It's fairly easy to configure so just go ahead, install it and you should find your way around with ease.

Then we have When-Then, a Windows app that can perform predefined actions based on certain triggers. You define a trigger such as the opening/closing of an app or a time-based event, and then define an action that you would like to automate. For e.g., every time you close your browser, you may want to open up Windows Explorer to access the files that you've just downloaded. Or everytime you close a movie in VLC Media Player, you may want your computer to shut down without you

having to make the effort. When-then is a tool that can perform such trigger-based tasks with ease. It's a free app, and even though it hasn't been updated in a while, it's definitely worth a try. Visit the following link to download When-Then – <http://dgit.in/NvuAvJ>

We all have our favourite TV shows which we simply can't live without. Some can be saved onto our DTH hard drives by having them programmed to do so, but what about those which don't air in our country or are "classics" or what if your DTH operator doesn't have that particular



Never have mundane tasks bring you down

channel, or what if you deem you're an adult and you deserve to watch uncensored shows? There are several shows that fit into any of these categories, some of our favourites are 5-inch floppy, Black Books, GOT, Coupling etc. Some of these shows have regularly released their torrents on popular websites. Given our 'busy' schedules, we hardly have any time to go through the entire torrent RSS feed and then download the torrent file and schedule it. Instead we can automate the entire process using a simple feature that uTorrent and a lot more Bittorrent clients have. We'll be focusing

on uTorrent here. You can either setup this on your main machine or on a torrentbox. Enable WebUI under the options panel of uTorrent to remotely access and manage your downloads from any machine with an internet connection. Simply go to <https://remote.utorrent.com/> and login with your username and password which you have entered in the WebUI settings panel. Follow these steps to automate your torrent downloads.

1. Get hold of the RSS feed of your favourite torrent site. It should resemble something like this  
<http://feeds.somedomain.com/SiteName>  
Where somedomain = Name of the web site which manages the RSS feed, it may be the torrent website itself or it may be some other service which does the managing or the web site.  
sitename = Title of the specific section of the torrent website or feed.
2. Under File Menu choose 'Add RSS feed' paste the RSS feed url here and choose 'Do not automatically download all items'. You can disable / enable / rename the feed. If the website requires authentication to view the RSS feed then ensure that the field is of the following format.  
<http://username:password@torrentsite.com/rss.php>  
Where 'username' is your username for logging into the website and 'password' is the respective password of the account. For sites that require you to have cookies enabled, find the cookie for the respective site from the cookies folder of whatever browser you are using. Open that file in notepad and find



out the uid/user/userid and pass/key/passphrase. Then put that in the following format while adding the RSS feed.

<http://torrentsite.com/rss.php?COOKIE:uid=maharaja;pass=ahukkipukki99j>

3. Now go to Options > RSS Downloader (Short-cut key Ctrl+R). Under the left column click on 'Add'. Type in a name for your filter.
4. **Filter:** Then in the edit box next to the filter add your filter while following these rules.
  - Separate each filter using [ | ]
  - Use [ \* ] or [ ? ] to denote wildcards to match a portion of the text string that you are searching for.
  - Restrict the usage of specific episode numbers of season numbers. You'll have to regularly keep fixing your filter every few months unless you do that.
5. **Not:** Whatever filters you include here will be used to remove the torrent from the download list. Now if the steam features both SD (Standard Definition) and HD (High Definition) but you wish to download only HD then putting SD here will ensure that all SD torrents that match your filters are not downloaded.
6. **Save in:** Type in the directory where you want your show to be stored.
7. **Feed:** Select the feed on which you want these filters to be applied.
8. **Quality:** Certain websites follow a standard for all uploads. You may select the quality of the download you wish to acquire and if the website adheres to the standard then uTorrent will download the appropriate quality file.
9. **Episode Number:** Often, sites undergo maintenance and quite often end up messing the feed which could mean an entire season's feed being re-published. Now, unless you wish to download the entire season all over again, you might want to set an episode number here. Only episodes that follow this will be downloaded. There are multiple formats for setting this filter.
  - If you wish to download a range of episodes (say 5-8) under season '6', then type in '6x5-6x8'.
  - To start any particular season from a particular episode (say season 7 episode 4 onwards), type in '7x4'.
10. Checking the "Don't start downloads automatically" will add the torrents

to your 'Inactive' list so that you can choose which to download after reviewing the list.

11. Checking the 'Give download highest priority' will ensure all torrents filtered from the feed get highest priority.
12. Setting the minimum interval ensures that uTorrent does not download another torrent which matches the filter for the said number of days. Quite useful for avoiding duplicates. So if the show which you are into releases every 5 days then setting it to 4-5 will ensure all matches within that period are ignored.
13. **Label:** If you set a particular custom label here then all downloaded torrents will be assigned the said label. This helps out a lot when you have to sort through hundreds of torrents.

Finally, there is the king-of-automators, AutoHotkey. As a topic covered extensively in the past, we will have to move past this very quickly. But, if you're new to this, here is a snapshot of the things that you can get done with this app: it can mimic keyboard and mouse inputs; manipulate your windows files and folders; monitor your computer to end unwanted processes; schedule tasks like backup, defragmentation and fill out online forms, among many (many)



Make your Linux PC your assistant

more. That's pretty much all the digital housekeeping you need. It can't make you a sandwich, though. Here's a quick refresher for the uninitiated:

1. Download the Autohotkey executable from <http://dgit.in/PP7aRJ> Install it to your hard disk.
2. Click on your Start Menu, locate the 'Startup' folder and right click > Open.
3. Create a new text file called Auto-hotkey.ahk
4. Head over to <http://dgit.in/MqL3RC> to customize your Autohotkey script. You can use the unused keys on your desktop's keyboard and automate nearly any action.

As an added bonus, the software is available for Linux too. Read more on our coverage at <http://dgit.in/autoht>.

## Linux

Linux is one of the most automation-friendly platforms, and practically anything that you want automated can be scripted using Bash or Python. Scripts are basically a collection of commands stored in a text file, and the shell can read these as if they were actually written to the command prompt. They allow you to automate almost any task, such as creating backups of your data, downloading or uploading material from predefined locations, making storage repositories, even sending you periodic e-mails about the progress, based on some criteria. Head over to <http://dgit.in/NfLxqm> for some examples of scripting operations. Since a full-fledged tutorial in scripting is beyond

## HOME AUTOMATION

Home automation might seem like a farfetched idea, but it is really closer to you than you think. Work has been going on for years, to make intelligent homes a reality. There are various protocols in existence that promise to achieve that dream. The first is the Jini architecture. Originally developed by Sun, it was later declared open source, and transferred to Apache. It basically defines an architecture that harnesses the power of the Java over distributed, mutually supportive systems. It is akin to Java's 'Remote Method Invocation', just in a more advanced form.

What that means is that any device that runs Java (and Java runs on a hell of a lot of machines, and not just computers) can intercommunicate using this technology. Look at more information on Jini at <http://dgit.in/KXCujd>. The next notable platform in the field of hardware automation is the X10 architecture. This is actually more of a private protocol, with an industry standard being released for communication between proper, non-computing hardware devices by the use of ports and bridges. Its application is pretty widespread. Find out more at [www.x10.com](http://www.x10.com).

the scope of the magazine, we would like to introduce you to 'cron', a very powerful, yet simple task scheduler for Linux. Cron is distro-agnostic and comes bundled along with GNU/Linux, so you won't be required to separately install any packages. Cron is a system daemon, meaning that it runs unobtrusively in background and executes commands without user intervention. Commands or scripts that are required to be automated can be added to the 'crontab', a text file containing these details along with other details such as frequency/time interval between successive iterations of those commands. For e.g. you can have cron backup your personal files to an external disk or any networked location at a fixed interval. As an added feature, rsync can be used as a backup utility. Rsync is a program that performs differential copying. This means that rsync will only backup those files and folders that have changed since the last backup, speeding up the process considerably. So if you've got a repetitive task that you'd like to perform at a regular interval, cron provides great flexibility in specifying such an interval and automating the task for you.

There are two main ways of specifying the tasks to be automated using cron. First, users should find three folders in their /etc partition - cron.hourly, cron.daily and cron.monthly. As can be judged from the folder names, any script placed inside these folders (including symlinks) will automatically be executed every hour, day or month depending on the folder. The second method is more powerful but slightly more complicated. Each user has a 'crontab' - a text file containing the commands to be executed along with information on when to execute them. To edit your crontab, open a terminal and type

```
crontab -e
```

The format of a crontab entry is as follows: minute (0-59) hour (0-23, 0 = midnight) day (1-31) month (1-12) weekday (0-6, 0 = Sunday) command. Each column entry is separated from the next with a single space. An asterisk [\*] indicates that the task is to be executed at every instance of the time period. For eg, say we have a backup script located at /home/user/Scripts/backup.sh. If we want to run this script at 9 AM every Sunday, the crontab entry will look something like this:

```
* * * * 0 /home/user/Scripts/
backup.sh
or
* * * * Sun /home/user/Scripts/
backup.sh
```

In the second alternative, the '0' for day of the week has been replaced by 'Sun' which produces the same effect. As another example, if we want to automate something at 4:40pm everyday, our crontab entry will look something like this:

```
40 16 * * * /path/to/automa-
tion/script
```

Although the command prompt is a very powerful tool for Linux, some people are not very comfortable using it. For these people, there are plenty of GUI options available. Applications like Sikuli and Tasks Till Dawn are Java based apps (and are hence cross-platform) that can make the process of automation dead simple. Sikuli lets you automate virtually any task that involves interactions with a GUI application, by using simple screenshots of a portion of the interface and giving a corresponding action (Such as clicking or entering text). For more information on how to use Sikuli, visit <http://dgit.in/O5w6WG>



Your phone can be configured to automate several mundane tasks which you perform on a daily basis. We show you how using Tasker and on{x}

So you've learned how to automate nearly any action on your computer or laptop, but the device that's most likely to be on you throughout the day is your smartphone. Smartphones have evolved at a dramatic pace over the years, and

today's smartphones are just as powerful (if not better) than the laptops from a few years ago. Certainly all this power can be put to better use than throwing birds at pigs or making your high-res photo look like they were taken fifty years ago. In this workshop we show you how you

can automate certain repetitive tasks on your phone and turn your handheld gadget into a true extension of your brain! Due to the open nature of the Android platform, Android phones have a near limitless potential for automation. If there's a task you'd like to automate, there's a very good chance that there's an app for that. During the course of this workshop, we take you through automating tasks on your phone with apps such as Tasker and other similar apps like Microsoft's new On{x} tool for building simple macros to automate your device. This includes things like backup your apps and settings automatically to your SD card, squeezing out a few extra hours from your battery using Juice Defender, and some futuristic stuff using NFC tags and your device's NFC chip. So let's get started!

## Automate nearly any task with Tasker

To start things off, the most powerful tool for automation on Android is without doubt, Tasker. While it's not a free app (and costs a pretty hefty ₹345 on the Play Store) we think it's completely worth it. Nevertheless, if you want to see what Tasker is capable of, the developers offer a 7-day free trial on their website (<http://tasker.dinglich.net/download.html>). Download and install the app to get started. You might need to enable 'Unknown Sources' in your phone's settings to install .apk files. Wink wink :-)

Setting up Tasker involves configuring three components – Contexts, Actions and Tasks. A rule that encapsulates all these three is called a Tasker profile. A Context is the 'trigger' that sets off a task, i.e. it is the 'if' part which determines what starts your task. Common triggers can include an application (opening, closing an app), a time of the day, a state (headset plugged in, phone plugged in to charger, low battery levels) or an event like receiving an SMS or a phone call. After choosing a context, we choose an Action, which is basically any action that your phone is capable of, including opening an app, showing a notification, toggling the GPS, Wifi or Bluetooth radio or sending an SMS. Individual tasks can be grouped into actions, so one action, can perform multiple tasks.

Finding all this too hard to follow? Fear not, we'll walk you through an example and then give you some really cool ideas that you can try on your own. You'll find that nearly any logical automation task can be performed by Tasker with ease, you're limited only by your imagination!

As an example, let's say that you want your phone to start your music player or music streaming app whenever you plug in your earphones.

1. Start the app and create a new profile. Give it a name.
2. For your first context, choose 'State', and 'Hardware' under State Category. Select 'Headset' from the hardware menu.
3. Now we need to define an action. Since we're launching our music player, we'll go with the 'App' option under Action Category. Select 'Load App' and choose the app you want to load.
4. That's about it! Tap the green check-



Edit each task to trigger actions

mark to activate the profile, and exit the app. You should now see a small lightning-shaped icon in your notification area telling you that Tasker is running in the background. Plug in your earphones and be amazed!

Now that you're familiar with Tasker, here are some tasks to try out:

1. Turn on your GPS whenever you open Google Maps (Only works for stock Android 2.2 or lesser, or custom ROMs)
2. Silence your phone when you place it face down on a table.
3. Make your phone play a random song from your music library as a morning alarm, or load your to-do list first thing in the morning.
4. Turn down your display's brightness / turn off mobile data at night and automatically turn it on in the morning.
5. Locate your phone using an SMS. You can send an SMS to your phone with a preset string like 'GPS ON'. After the GPS has been turned on, you can make your phone send you timely updates of its location.
6. Remind you via SMS or a reminder whenever it's your friend's birthday. (or any other event on Google Calendar)
7. Auto-respond to calls or SMSs when you're driving (i.e. when the phone is docked) or when you're asleep.
8. Display the missed call/unread SMS/unread email count on your homescreen/lock screen using an app like Minimalistic Text.
9. Unlock your phone whenever it connects to your home Wi-Fi network.
10. Perform a full Nandroid backup of

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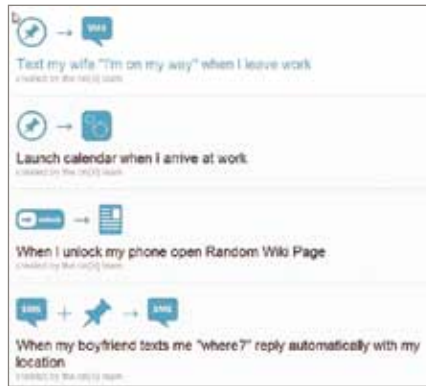
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your system ROM every night to your SD card and have it sync to Dropbox/Google Drive/Box/SugarSync using FolderSync. (<http://dgit.in/MqPhZu>)

For a much larger and comprehensive list of all that Tasker is capable of, visit <http://dgit.in/Mh4g74>

These tasks barely scratch the surface of what Tasker is capable of – use your imagination to come up with some creative ways to put your phone to work! Having said that, Tasker isn't the only app that can automate your phone. There are free alternatives like Automate It! (<http://dgit.in/PjglJT>) and Llama (<http://dgit.in/LyRYX0>) for Android that can perform a subset of Tasker's features. Most common triggers like time, location or the phone's state can be used to create rules with these apps, though they're not quite as flexible as Tasker. A new entrant is an app by (none other than) Microsoft called On{x} which is strangely available only on Android devices and not Windows Phones. After signing up, On{x} uses Javascript APIs to create automation 'recipes' such as reminding you to buy milk on the way back from work, automatically sending out an SMS when you leave for



Microsoft's On{x} simplifies tasks

home or opening your calendar app when you reach work. Though creating a recipe is slightly complex, there's a large collection of ready-to-use recipes that you can try out. Here's how you can use On{x} to automate tasks on your Android device:

1. Download the On{x} Android app from the Google Play Store. <http://dgit.in/NleGQZ>
2. Sign in to the app using your Facebook credentials. (The app is currently in beta and only supports login via Facebook.)
3. Head over to the On{x} website at <http://dgit.in/LI85Sc> and sign in once again.

4. You'll see a list of recipes that you can send to your phone. Simply clicking on 'add' should push them to your phone, and they'll start getting implemented right away.
5. Any text that is highlighted in the recipe, can be customized. For e.g. you can specify your home or office location by specifying their latitude and longitude on Bing maps. For tasks that require a phone number, you'll obviously have to enter it for the task to work.

Near Field Communications is a new concept that draws on existing RFID technology to create 'tags' that support 2-way communication. Apps like NFC Task Launcher allow you to automate actions by simply tapping your phone against an NFC tag. Say you're heading out to work, you can tap your NFC enabled phone on an NFC tag placed on the back of your main door and perform an action like turning on the WiFi or turning up the ringer volume all the way. Though only a few devices support NFC at the moment, we love the idea of tapping your phone and having it perform a bunch of tasks right away!



## Take some time out, and find out what you can do to let the web take care of itself

As the web becomes more and more social, users find themselves having multiple online accounts on social networks, cloud storage services, book-marking services and so on. Instead of managing the nitty-gritties of sharing data between accounts, why not automate

the whole process? From saving email attachments to your computer, posting your favourite YouTube link on Facebook, to getting weather alerts on your mobile, the internet's got your back. What's better is this process of automation does not require you to have any programming knowledge whatsoever, as all services provide an easy interface to create and store such automation rules. Probably the most well-known and widely-used service is If This-Then That, better known as [www.ifttt.com](http://www.ifttt.com). Ifttt provides a simple way to set up tasks based on a given scenario. You

give it a condition ('if this') and then it does the job ('that') for you. The condition is called a trigger, and the job is called an action. The trigger and action are based on various web based tools called channels, which include all major online services like Facebook, Twitter, Gmail, Dropbox, Google Reader, Pocket, Evernote, Instapaper and Instagram. Put one channel's trigger together with another channel's action, and you have with yourselves a task. A task is an automation rule that you define. To create a task involving an online account, you need to activate the channel first, by signing in to the respective network. Most channels like Twitter, Facebook and Dropbox use OAuth, so the authentication process is very secure. Once you've got your channels activated, it's time to set up a task. On logging in, you'll see your dashboard with a list of all

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HDMI TV - Out | Videos | Music | Pictures | Documents |

FM Radio | Voice Recorder | Dictionary | WordUp |

Micro SD Card Slot | Built-in Speaker | Bluetooth & G-Sensor |

Touch Feedback | NTFS File System

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## CREATING A NEW TASK USING IFTTT



1. Click on 'Create a task'.
2. On the next page, click on the big blue 'this' and choose a channel to trigger your task. For the purpose of our example, choose the Facebook icon and log in. Your Facebook channel is now active.
3. For the trigger, select the option that says "You are tagged in a photo". This action will automatically be triggered every time you're tagged in a picture. Ifttt usually polls your data every 15 minutes, so there might be a slight delay in the action.
4. The next step is to choose the action you want it to perform. Click on the big blue

'that' on your screen.

5. Our action is to save the picture in to Dropbox, so we select the Dropbox channel and activate it using your Dropbox credentials. Select the 'Add file from URL' action.
6. Complete the task by specifying the necessary details. For this task, select Image Source to be the file URL, and designate the path to save the photo in Dropbox.
7. Add tags to easily find your task and save it.




your currently active tasks and channels. If you're not quite sure what ifttt does, we'll walk you through it with an example. Let's say that every time someone tags a photo of you on Facebook, you want to save that photo to your computer and be able to access it even without a Facebook login. A good idea would be to save that picture to your Dropbox, so you not only have a local copy but also have access it from anywhere. Here's how to create a task that automatically saves your tagged photos from Facebook to Dropbox: You can also ON/OFF the tasks you created on ifttt. If you think your task can be helpful to others, make it a 'recipe' to let others use it too. There already exist a huge number of these recipes, so spend a few minutes looking through the list, and you might find what you need. Some popular ifttt recipes include:

1. Cross post between social networks - Post all your tweets to Facebook or vice-versa
2. Automatically save the links in your favourite tweets to Readability/Pocket/Instapaper.
3. If Facebook profile picture changes, update twitter profile picture

4. When a new book is added to Kindle Top 100 free ebooks, notify me via email.
5. Make it such that if it is going to rain, I get a text message.
6. Save all Instagram photos to Dropbox.
7. When you publish a new blog post on Wordpress/Tumblr/Blogger/Posterous, send a tweet or update your Facebook status with the link and the title of the post to notify your friends.
8. Send your favourite Google Reader articles to Buffer, and let it take care of spacing out your tweets.
9. Save your bookmarks to multiple bookmarking services like Delicious, Pinboard, Diigo or Evernote.
10. Watch Twitter for #Appoftheweek and send an email notification for the same.

While ifttt is great when it comes to automating tasks involving your online accounts, it can't do much else. Wappwolf (<http://wappwolf.com/dropboxautomator/>) is an excellent online tool that can automate several file-conversion tasks for you. It monitors a folder in your Dropbox, Google Drive or Box account for files of a certain type, and whenever you add such a file, it can perform a set of actions on those files, most prominent among which is file conversion. You can convert most popular audio, video and document formats and can have Wappwolf perform additional actions such as uploading it to Google Docs, adding it to Evernote or uploading it to your Amazon Kindle device.

Other web automation services include <https://zapier.com/>. It's similar to ifttt but has fewer networks, with the absence of many popular ones like Facebook. On the upside, it provides an intuitive drag 'n drop interface. Ping.fm (<http://ping.fm/>) can manage your social networks for you, by posting to all your social media sites from one place. You really need such a service in this day and age when society places great emphasis on your online persona. Tarpipes (<http://tarpipes.com/>), similar to Yahoo-pipes is a more flexible approach when it comes to publishing data on the web. The service makes it easy to share content across different social media applications. The workflow tab lets you decide what part of your data will be published where. For example, you can set up a Tarpipes to receive an email and post the title to twitter, upload an attachment to Dropbox or Flickr and archive the text of the email by saving it to Evernote. Mac users can also make use of Dropipes, an OSX application that uses Tarpipes's API, to upload pictures directly to the service from your desktop. Tarpipes is your solution when you want to customize the flow of your data more granularly. Having multiple online accounts means you get access

to a rich variety of digital content, but managing it all can be tedious. These tools can greatly decrease your maintenance tasks by truly putting the web to work for you! 

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# 2012: THE YEAR WHEN THE **POWER** PASSES BACK TO THE **PEOPLE**



India's first true 'gadget award' changes the rules of the game – hands back the voting power back to the ultimate authority: the people!

Most of you reading this will not be able to imagine a world without smart phones, paper-thin TVs, ultra light laptops, etc. It's a gadget-hungry world, and businesses, homes, and even your very life, is all run on technology – the last thing you can afford to do is stay aloof and uninformed, lest you become labeled as “obsolete” yourself.

All of us are bombarded 24x7 with messages – so often ambiguous, advertising tends to spew a series of unscramble-able adjectives. With cutting edge technology available at versatile price points from more brands than you care to count, none of us really has a choice other than to stay informed, stay educated. Although the tech quotient of the “average user” has skyrocketed in the last few years, the digital divide between tech guru and

consumer is pretty much the same, given the vast amount of complexities and variables every new technology and manufacturer brings into the system.

It is in this spirit that India's first awards for gadgets, gizmos and technology, TECHLIFE – Lifestyle & Gadget Awards was started. It began as an effort to recognize dynamism, innovation and excellence in the field of technology, and soon went on to become an institution of sorts – recognizing and awarding only the most cutting edge gadgets.

Techlife 2012 brings to the table a superior knowledge base, reaches people through its 8-city corporate activation program, and gains access to every corner of the country via social networking sites. The most distinguishing aspect of this year's Techlife is the introduction of 6 popular voting categories (i.e. Smart phones, Tablets, Laptops, Cameras, Apps

and Online retail web sites) in addition to the 20 specialised jury categories.

The entire evaluation criteria has been revamped as well, and the traditional “call

“Techlife – Lifestyle & Gadget Awards is a proven platform that recognises the best consumer technology products and brands in India. Digit's association with Techlife Awards Season 3 as a Knowledge Partner adds tremendous value and credibility to the overall awards process. The popularity of Techlife Awards as a platform coupled with Digit's 11 years of testing experience at the Digit Test Centre is undoubtedly a winning combination.”

– Soham Raninga

Editor – ThinkDigit.com



for entries" format has been scrapped. This year, participation is guaranteed by virtue of a product being launched in the year gone by, thus extending the canvas to every player in the Indian market.

Techlife – Lifestyle & Gadget Awards, as always, partners with some of the most illustrious names in the business. At the helm of this alliance is 'You Broadband' – the country's leading independent ISP, covering almost a thousand kilometers of optic fibre connectivity and over 4100 kilometers of coaxial cable network. Here's what EVS Chakravarthy - CEO of this ISO 9001-2008 company, had to say about this partnership, "Broadband usage is gradually moving from a PC to multiple devices. Soon we will witness the per capita screen size moving up significantly in India. Innovative Broadband service providers would

"Innovative Broadband service providers would love to be associated with a platform like Techlife awards as this would be a perfect medium to be at the center of the smart device choice process by customers who use these devices for broadband access. While the devices have features, YOU Broadband brings them to Life."

– **EVS Chakravarthy**  
Chief Executive Officer  
You Broadband and Cable India Ltd.



The Techlife Lifestyle & Gadget Awards 2012 Jury: Making some tough choices!

love to be associated with a platform like Techlife awards as this would be a perfect medium to be at the center of the smart device choice process by customers who use these devices for broadband access. While the devices have features, YOU Broadband brings them to Life."

Ernst & Young – who have in the past handled the order of 'process advisors and official tabulators', continue to lend their judicious expertise to the eligibility criteria and evaluation parameters. Significant credit for the success


of this award must be attributed to the able support offered by Techlife's team of partners that included (powered by) Snapdragon, (steered by) Maruti Suzuki, Digit (knowledge partner), Reliance Digital Stores (retail partner), Trend Micro Titanium (security partner), cleartrip.com (travel partner), Star CJ Alive (gift partner - India's premium home shopping channel), ET Now (television partner), Times OOH (outdoor partner) and Radio Mirchi 98.3 FM Its Hot (radio partner)

With the inclusion and involvement of a plethora of brands and products, the jury members this year had their work cutout. The core team comprised of:

- **Hitesh Raj Bhagat:** Head, Personal Technology vertical for Economic Times.
- **Soham Raninga:** Editor, Think-Digit.com, India's most visited technology portal, and
- **Rajat Agrawal:** the tech guru with an unreal obsession with anything mechanical that can connect him to his world.

The core jury's key mandate was to shortlist the nominations for the most coveted Popular Choice categories:

- **Best Smartphone category:** featuring Apple, Blackberry, HTC, Nokia and Samsung,
- **Best Tablet:** featuring Acer, Apple, Blackberry, Lenovo and Samsung.
- **Best Laptop:** featuring Acer, Dell, HP, Lenovo and Sony.
- **Best Camera:** featuring Canon, Fuji Film, Nikon, Panasonic and Sony.
- **Best App:** Angry Birds - Rio, Fruit Ninja, MapmyIndia, Saavn and Zomato.
- **Best Online Retail website:** ebay.in, flipkart, indiaplaza, indibeam and snapdeal.

Since you're a part of India's geekiest community, make sure your opinion is also heard by taking part in our online initiatives – Facebook, Twitter, YouTube and [www.techlifeawards.com](http://www.techlifeawards.com). Help us ensure that the truly deserving gadgets are recognised and rewarded for their efforts, and thus push the bar higher. It's a good way to do your bit towards improving the quality of gadgets and services available in India! 

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**TECHLIFE**

THE LIFESTYLE & GADGET AWARDS 2012

Steered by **MARUTI SUZUKI**  
**Way of Life!**

Retail Partner **Reliance digital**  
We bring technology to life for you



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THIS YEAR WE'RE HANDING THE

# POWER TO THE PEOPLE

GO AHEAD, VOTE!

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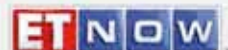
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**YOU**  
BROADBAND

**TECHLIFE**

THE LIFESTYLE & GADGET AWARDS 2012

Steered by **MARUTI SUZUKI**  
**Way of Life!**

Retail Partner **Reliance digital**  
*We bring technology to life for you*

Here's your chance to vote for a lifestyle and gadget brand. Cast your vote in favour of any of the brands in the popular categories mentioned below and you could win a host of exciting prizes!

SMART PHONE	TABLET	LAPTOP	CAMERA	APPLICATION SOFTWARE	ONLINE RETAIL
Nokia	Apple	Lenovo	Nikon	Zomato	e-bay.in
Samsung	Samsung	ACER	Sony	Saavn	Flipkart
Apple	BlackBerry	DELL	Canon	MapmyIndia - Sygic	Snap Deal
Blackberry	Lenovo	HP	Panasonic	Fruit Ninja	Infibeam
HTC	Acer	Sony	Fuji	Angry Birds - Rio	India Plaza

For more information, kindly log on to [www.techlifeawards.com](http://www.techlifeawards.com)

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**ERNST & YOUNG**  
Quality In Everything We Do

**DIY - Geek Survival Kit**

A simple list of things the average geek needs to get by when the going gets tough and there just isn't enough to do

**Tips & tricks**

Gmail, Skype, netCut / Netcut Defender, web apps, Unity, Google Analytics covered this month


# Internet woes, power deficiency and one crazy laptop...

... things may not be the way they seem to be

## Power plans on the laptop

My laptop is Dell Inspiron n-5110, 2nd gen Core i5, 1 GB NVIDIA GeForce 525m, 4 GB RAM and Windows 7 Home Basic. When I plug my laptop to the power supply, its performance in games is much better as compared to when it isn't charging. I want optimum performance even when my laptop isn't charging. Please tell me how.

*Abhinav Sharma*

 You can go to the Power Management settings in the Control Panel (Control Panel > System and Security > Power Options), and adjust your laptop's power management plans. Most



**Modify power settings to suit your needs**


laptops, when on battery, have a power-saving plan by default, which might result in poor gaming performance. You can either choose "High Performance", a pre-designed plan, or create your own power plan to suit your needs. You can select the various parameters to have a few features set to maximum performance and switch off/reduce other parameters which would be of little use during gaming. Wi-fi performance would be of little use if you are playing an offline game.

## Graphics conundrum

Whenever I try to open my ATI CCC I'm not able to change my display setting at all. I

tried to search on the net but did not get any positive vibes from there. I tried to install latest drivers from HP and from ATI, but then also I'm not able to change it. Last, I tried to do system restore (Factory Restore) but then also I'm not able to change it. Can you please suggest how to change my display setting in ATI. But on Intel HD 3000, I am able to change my display setting but the option is missing from my ATI Graphics Card. My laptop is a HP Notebook DV6 6115TX. Please help me with this problem. Last but not the least when I try to change my Graphics mode from Dynamic to Fix in my Bios Setting which is F.1B (latest) provided by HP, my V-Sync is always turned down. Any application or any image I try to edit my image starts to get a tearing feeling. I am not able to play single games in fix mode, but on net I have heard that in fixed mode you will be able to play games fluently, but in my case I am able to play only in Dynamic mode fluently. And in my Screen Resolution Setting I am only able to get the option of Intel but the ATI option is missing which is available in Fixed Mode. All my friends are having this kind of problem. So in behalf of all of them I want your help in this matter.

*Dipan Talukdar*

 1] Most likely you have switchable graphics turned on, while on low load the laptop will manually switch to HD3000 to cut power usage and thus your Catalyst Control Panel doesn't show the required settings. Switch off Switchable Graphics and check again.

2] Do you need V-sync? Do you experience image tearing while playing games? Enabling V-sync will limit your frame rate to that of your monitor's refresh rate which is usually 60Hz, so your FPS(frames per second) will be set to 60. Otherwise, let V-sync be turned off and

manually adjust the refresh rate till you no longer experience tearing will help. Though this is much more fussy and will lead to more issues when set to non-standard values.

## Internet required!

I am a new reader but very impressed with the value presented in the issue I have seen.

I am a Swiss (61 years old) living in an Ashram at 7,000 ft elevation near Uttarakashi in Uttaranchal.

I don't have a lot of equipment as my life is simple. We have no phone or direct internet access here.

I do email a couple of times a week when the purchaser goes into town and takes my USB drive to the nearest internet cafe to do a send/receive.

Recently a friend sent me a Kindle Fire because we often don't have electricity and this way I can view documents, video files etc at leisure. I resisted the urge to try to root the Kindle to enable apps from Android such as Sanskrit Dictionary and Jyotish etc. which are not available from Amazon App Store so I am running plain out of the box system version 6.3

The problem is that most of the apps I did load on my trip to town to register the device on the amazon site all of a sudden refuse to open. The error message says that the app needs to connect to the net. There is no real reason it would need to except maybe to check for updates but I can't find any way to restore functioning. My brother in the USA did a search on the error message and there was discussion about it but no solution short of opening the app while on-line every couple of weeks.

I have no desire to make a full day trip to the town and the internet cafe doesn't offer wifi anyway. For that one has to go to one specific hotel. Any suggestions you may have are most welcome.

*Steve Herzfeld*





## Apple's Smart case for iPad

Apple recently released Smart Case for its iPad. It is the full-folio case with front & back cover, available for \$49. <http://dgit.in/Lsuu5Z>

Q&A

It seems like a lot of Amazon Kindle Fire users suffer from this issue. Developers may apply Digital Rights Management (DRM) to their applications, which requires you to connect to the Internet once every 30 days to ensure your account is still holding the license to use apps on your device. Also sometimes free apps need to connect to their vendors to update the ads. So you will have to connect to the Internet and re-sync the app library.

- Connect to the Internet.
- Re-sync the app library: Tap Home > Apps > Store > Menu > My Apps > Refresh button

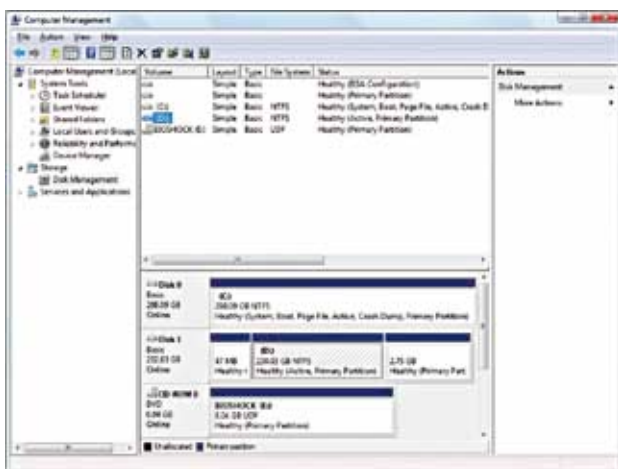
Amazon does not offer any way around this issue, so I guess you will have to connect to the net once every 30 days.

## Missing partitions

Guys, Since 3 Or 4 Days I Am Having problem With My "Western Digital My Passport Essential 1 TB USB 2.0 Hard Drive The Problem Is That It Detects On Any Operating Systems But Can't Show Up In "My Computer". It Shows An Error That "Your Hardware Can't Work Properly". The Indicator Light Becomes Steady At That Time. What Can Be The Problem? Can You Guys Help Me?

Indrajit Mahida

If the drive was recently wiped clean including the file system, then it will need to be initialised before it can show up in the Explorer. Run `compmgmt.msc` and under Disk Management check if the drive is online. If not then right



Disk Management utility

click and select 'Online'. Then initialise the disk. Initialising the disk will wipe it of all data. So if the data is of utmost importance then the last thing you could do is to extract the hard drive from the casing and connect it internally to your computer and then try recovery tools to back-up whatever data you can. All warranty will be void once you damage/open the case.



### Z77HE-A2X



- LGA1155 CPU
- 8 PCIe Slots x 16
- 3 PCI
- 4 Serial-ATA (SATA 3Gb/s) / SATA (3Gb/s)
- 4 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 2 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 1 Frontal LAN (RJ45)
- 1 Frontal USB 3.0
- 1 Frontal USB 2.0



### Z77HE-A2X Deluxe



- LGA1155 CPU
- 8 PCIe Slots x 16
- 3 PCI
- 4 Serial-ATA (SATA 3Gb/s) / SATA (3Gb/s)
- 4 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 2 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 1 Frontal LAN (RJ45)
- 1 Frontal USB 3.0
- 1 Frontal USB 2.0



### H77HE-M3



- LGA1155 CPU
- Intel® H77 Chipset
- 8 PCIe Slots x 16
- 3 PCI
- 4 Serial-ATA (SATA 3Gb/s) / SATA (3Gb/s)
- 4 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 2 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 1 Frontal LAN (RJ45)
- 1 Frontal USB 3.0
- 1 Frontal USB 2.0



### H81HE-M2



- LGA1155 CPU
- Intel® H81 Chipset
- 1 PCIe Slot x 16
- 1 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 1 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 1 SATA (SATA 3Gb/s) / SATA (3Gb/s)
- 1 Frontal LAN (RJ45)
- 1 Frontal USB 3.0
- 1 Frontal USB 2.0

**Twitter's tailored trends**

Micro-blogging site Twitter launches tailor trends feature to display the most relevant tweets only.  
<http://dgit.in/KeFf9u>

**10 Geeky Wedding Gifts**

Here is the list of 10 fabulous wedding gifts to congratulate the couple in a true geeky style.  
<http://dgit.in/LuqLDc>

# DIY - Geek Survival Kit

If you are a geek, you'd probably have all of these

Mithun Mohandas  
[readersletters@thinkdigit.com](mailto:readersletters@thinkdigit.com)

A massive power-cut, out camping in the wilderness, a zombie apocalypse or any of the multitude of situations in which you'd be separated from your comfort zone which means a dearth of power and gadgetry – these are situations which require us geeks to turn to desperate measures. Having a few things handy things about can help tide things over. So we've put together what we'd call a Geek Survival Kit.

## Re-chargeable Batteries

No survival kit of any kind is ever complete without a couple of batteries. About 4 of each type - AA, AAA, D, 6HR61, HR20 are preferred. More so it would be better if they are all rechargeable. Club the batteries with a crank charger and you've got the power needs taken care of, however, if you don't want to take the effort of cranking every few hours then we've also included a solar charger below.

## Duct tape



There are hardly a few things in this world that can't be fixed with duct tape which makes this an absolute essential. After all,

this simple product made out of plastic, cloth, rubber and resin has been used to fix all sorts of things including overly chatty folks, so never underestimate its utility value.

## WD40

If something isn't moving but should be moving, then spray it with some of this miracle fluid and it should get the



gears turning within a few minutes. It can lubricate, remove grease, remove rust, provide a waterproof coating, remove chewing gum, stop squeaks etc. There are websites dedicated to listing out all uses of WD40 and they are still finding more uses for it. No toolkit is complete without one.

## Solar panel + LM317 + Variable pot + capacitors

Using a combination of these items, you can build a power supply which should output enough voltage to power most handheld devices. Solar panels, the size of a normal laptop contain enough solar cells to output about 12 volts. Using the LM317(variable voltage regulator) in its standard configuration along with a few filter capacitors will allow you to produce an output between 1.5 to 37 volts or the maximum the solar panel can output, whichever is lesser. This option is more suited for the lazy geek who wouldn't want to spend an awful lot of time cranking a crank charger.

## Multi-port USB Cable

Avoid carrying around a heap of cables, opt for one of these multi-port cable with only one inherent flaw - you can only connect one device at a time. That can be easily solved by clubbing it with an powered USB hub.



## e-ink reader + PMP

For entertainment on the go and longer battery life, using one single gadget would simply not be prudent. With two gadgets you

can use one while the other is being re-charged. Don't forget to stock-up on your favourite manga, music, books, movies and TV shows. Also, investing in a few memory cards would be better.

## Swiss Knife

The Swisschamp VAXT, a must have. I'm just going to list out some of the items this one has - blades for different purposes, reamers, bottle openers, scissors, wood/metal saw, fish



scaler, pliers, magnifying glass, LED light, pharmaceutical spatula, screw-driver with more than 20 bits, corkscrew, chisel, toothpick, tweezers, ball point pen, altimeter, barometer, digital clock and a lot more. In total, this nifty little thing has 80 functions. The catch is that it's pretty expensive - \$359.99 or ₹20,000. In geek currency this means skipping out on 6-8 new game titles to gather up enough moolah or you could get a cheaper one for as low as ₹200.

## Multimeter

Quite simply put, it's a device that can be used to troubleshoot and subsequently repair other devices. A good auto ranging Gossen Metrawatt multimeter is not for the average joe but in the hands of a geek, it's a panacea for all problems that could go wrong with an electrical gadget. A good multimeter will have proper fuses for both, the ampere and the milliamperes ports. They'll also have the ability to test capacitors and diodes as well.



## Optional items

A MASSIVE KNIFE + Portable water purifier + lock-picking set!!

## GMAIL

### Mute a conversation in Gmail

It is actually impossible sometimes to mute the people in reality but at least you have that freedom while using your Gmail account. If your Gmail inbox is flooded with an ongoing conversation and if you don't want that thread to be bumped up each time in your Gmail's inbox then you can simply mute that conversation.

Check the conversation email. Go to More actions tab > Mute

You can also use shortcut key [m] for the same. (Settings > General > Keyboard Shortcuts > On)

Now these emails will stay archived. Muted conversations will only pop-up into your inbox when they are ready for your attention or someone sends you an email directly. If you want to find a muted conversation simply search with the following string in your Gmail search box: is:muted If you want to unmute a particular muted thread, select that particular muted conversation email and then click on Unmute, that is present under the More actions drop-down menu.

### Get Desktop voice notifications from Gmail

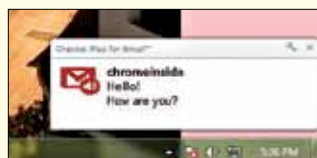
Wouldn't it be great if a voice from your PC told you about a new email, or better still have it read the mail out to you? It's possible if you are using Chrome to access your Gmail account. Checker Plus is the extension that displays new emails that arrives in your Gmail account when you are logged-in and even read them out.

When new mail arrives, a window will pop up to preview, read, archive, mark as read or delete emails without leaving the current tab.



Gmail.....	41
Skype .....	42
netCut / Netcut Defender .....	43
Web Apps .....	44
Unity .....	46
Google Analytics .....	47

{ Tips & Tricks has its own page numbers, and does not follow the rest of the magazine's page numbers. This is done to ensure that you can cut out and save T&T in a separate folder for later reference. }



Get Desktop voice notifications from Gmail

Download Checker Plus for Gmail on your Chrome: <http://digit.in/LmaljG>

### Access your Hotmail account within Gmail

Have you ever tried using Hotmail account inside your Gmail? Sounds cool eh? It's possible to check the mails from your other accounts by using POP3 settings. You can even read or compose emails from your @hotmail.com, @msn.com, @live.com account while using Gmail. To do so, first you have to tweak some Gmail account settings. Open your Gmail account > Gear icon > Settings > Accounts > Add a POP3 mail

account you own. Enter your MSN account and then follow the wizard. Remember, you can add up to five other email accounts within your Gmail. You will find an email from the Gmail team confirming your action and in the first few lines you will get that verification code. You just have to grab that code, enter it in the text box on Gmail's verification window and hit the Verify button.

### Find the Google+ circle information right in your inbox.

You always spend lots of time on building your Google+ cir-



Access your Homail account within Gmail

cles for your friends, families etc. Also, you always get loads of emails daily and sometimes it is impossible to remember the senders of those emails. You can now use those circles to filter your emails and newsletters. That will definitely save your time on checking them in your inbox and various folders in Gmail. When you get an email from one of your friends, you can check whether he is in your friends circle or not. If you have added him in your friends circle you will notice his name and circle information displayed alongside. You can even add people to different circles directly from Gmail.

### Share Gmail attachment pics to Google+

We always share pictures, quotes and wallpapers with our friends. Sometimes we upload the pictures on some social media sites or a Picasa web album. Most of the time we



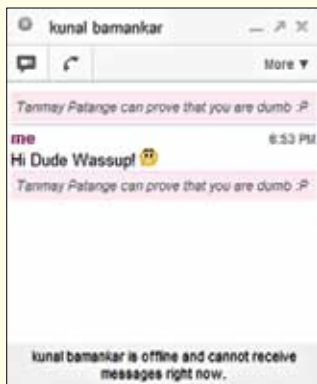
Share the Gmail attachment pics to Google+

send images via emails. But if we want to share those same photos with friends on Google+ then we are required to download those images from our Gmail account and re-upload them to our Google+ profile. Not any more. Now you will notice a Share link besides an attached image and you can directly share that image on your Google+ profile.

### Add personality to chat conversation

Isn't it cool to add some personality while chatting on GTalk, Gmail or Google+? You can also disguise messages as system generated notifications while chatting with your friends and





Add personality to chat conversations

you will surely astonish them if they are not aware with this chat trick. You have to use following command method: “/me [expression or statement]” results in italicized “[your name] [expression or statement]”. Use that command without (“”) quotes. So go ahead, have some fun with your friends.

## Control Email notification from Google+

We always get a lots of updates and notifications on Gmail from our Google+ accounts. If you want to stop those notifications or if you just want notification for particular action then you can customise the settings as per your needs on Google+. Here's what you need to do:

Go to Account settings > Google+

You will find lots of options to manage email subscrip-



Control the Email notification from Google+

tions and notifications. By default, most of the options will be checked mark so you can uncheck them if you want to stop the notifications for that particular action.

## Save attachments from an Email thread to Google Drive

It is now possible to automatically move attachments from an email thread to your Google Drive. Do this by using Attachments.me Chrome extension.

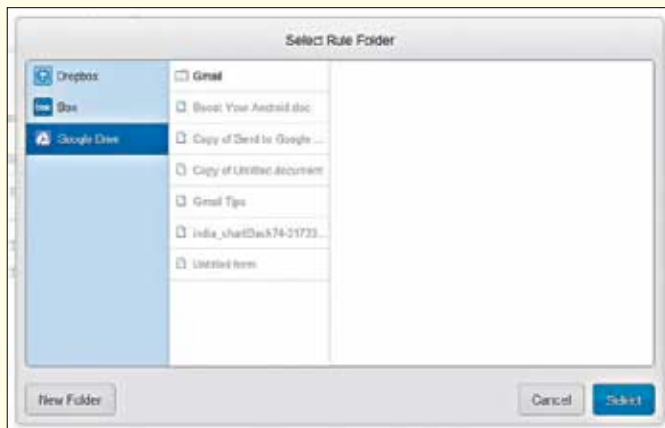


Do stuff like this

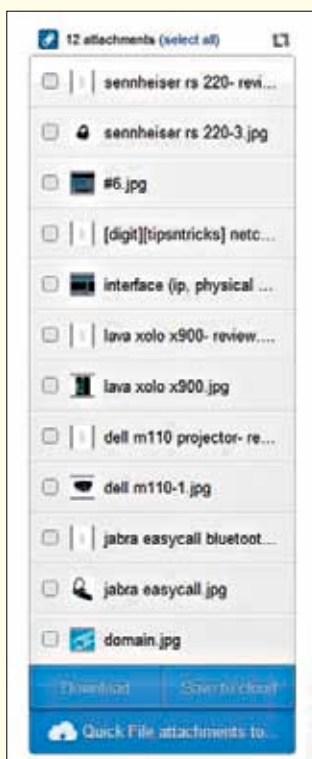
This Chrome extension allows you to organise all the attachments from your email. It is easy to set up this application and once done, all attachments from a new email thread will automatically get uploaded to Google Drive. The advantage that we find is, you can actually store those attached files without leaving your Gmail. Download the extension from here: <http://dgiti.in/MNVX16>

## Customise the Gmail interface

Wouldn't it be cool to remove the Ads from your Gmail account? It is possible by using the “Enhancements for Gmail” Chrome extension. By using this, you can actually customise Gmail's look as per your requirement. This extension allows users to remove chat, remove “invite friend” option,



Use attachments.me to save attachments



Save the attachments from an Email thread to Google Drive

remove Ads, remove footer, remove web search button, add highlight row, add attachment icons and much more. It makes Gmail default email application and users get new email notification through a pop up message.

Download the extension from here: <http://dgiti.in/LmanrZ>

## SKYPE

Skype is the most popular VoIP technology to make free PC to PC voice and video calls

around the world. It lets you place low-cost calls to your friends and family on phone. Here we tell you a few things that you might not know about your favourite software.

## SMS to Skype

SMS to Skype is a free service by Connectotel allowing GSM mobile phone users to send a text to any Skype user. In the 'New Message' window of your cellphone, type skype <Skypename of Recipient> <Your message> and send to +447747782320(International SMS rates apply). For example if you want to send a text to nealcaffery, type skype nealcaffery Hey! How are you? in the message. Also change the privacy settings of your Skype software to “allow anyone to contact me”.

## Hidden Skype emoticons

Skype has a great set of built in emoticons. If you move your cursor over them, you'll see their code. When you type that code in the chat box, you'll get the respective emoticons. But there are a few more emoticons that are hidden from you. Try the following for a little fun: (drunk) (headbang) (smoke) (bandit) (poolparty) and (rock). Use wisely, live well! For more such emoticons, visit <http://dgiti.in/Mz3YWS>.



Hidden Skype Emoticons and Smileys

## Chat Command

There are many chat commands in Skype, which let you do a lot more than usual. One of them is `/me [text]` command, for example `/me is having lunch!` Sure you could just type "I am having lunch!" in the chat box, but it's displayed much cooler using a `/me` command. To see a list of the relevant chat



Skype `/me [text]` Chat Command

commands simply type `/help` into the chat. Have a look at the other chat commands at <http://digit.in/MGcnLs>

## Skype Voicemail

Skype Voicemail works like any voicemail service should. When you're away from computer, or on another call, have the caller leave a voice message for you. Alerts can be sent on your email address too. Record your 60 seconds voice message greeting to be played when you're not available. To configure Voicemail, simply open Skype, click **Tools** > **Options** > **Calls** > **Voice messages**. Now, whether you're having lunch or in the shower, let skype take your messages and play them for you when



Skype Voicemail

you sign in. Set up voicemail here <http://digit.in/MCywac>

## Share your screen

Ever had problems explaining to someone how to use a software? Now show them exactly what you're looking at, on your computer screen with Skype's screen-sharing option. Just click on the Share button in the call window. You can still see



Skype Screen Sharing

your friend's video in a small window on the top right corner of your screen. This option has great utility –use it to help your parents use the computer, show your friends pictures of your vacation, or just watch something together.

## Connect with Facebook

Connect your Skype account with Facebook and get your news feed within Skype. You can update your status via

Skype. Skype also integrates Facebook chat, so calling your friends is just a click away.

## Skype WiFi

Skype WiFi (formerly known as Skype Access) is a fantastic way to browse the web and save internet costs abroad. When a public WiFi hotspot is in range, and you don't think it's safe to pay electronically or they charge you for the whole day even if you just want to check your email, Skype WiFi lets you pay-per-minute using your Skype Credit as payment. It can be used on laptops, iPad, iPhone and iPod touch. Download the Skype



Skype WiFi

Wifi app, and login with your account. When you login, you will see a list of hotspots you can join. Once you're online, only pay for the time you're online and not for the amount you download. Hotspot providers in India which support Skype WiFi are FON, iBahn, O-Zone, Tata and Tomizone charging 5-16 credits/minute; with a

decent coverage including airports, major railway stations and coffee shops.

## Edit/Delete your message

There are times when you accidentally send a message in the wrong window, or mistype something. In this so called busy life, our chats are always full of typos and it gets really irritating when one corrects it by adding an asterisk(\*). Skype offers you the option to right click on the sent message and edit it or rather delete it from the chat log altogether.

## Drag and drop to send files

Ever need to send a file quickly, instead of having to upload or email it? Just drag and drop the file in your chat window. Drag and drop in a group chat to send files to everyone in the group chat.

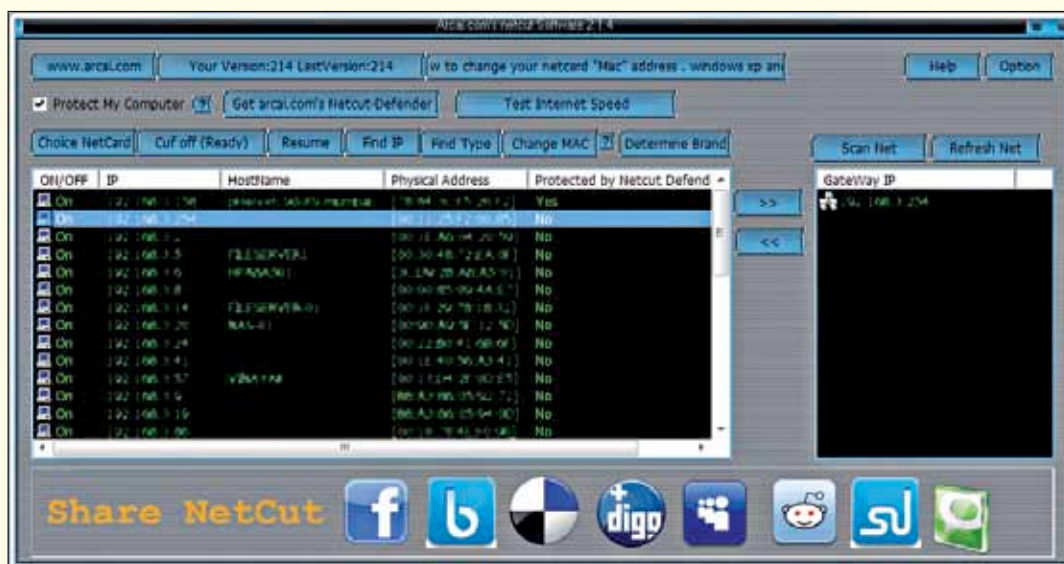
## NETCUT / NETCUT DEFENDER

netCut is a feature rich network administration tool that lets its user perform a variety of tasks, without much hassle. It has managed to make simple click-and-go tasks out of what were previously a sequence of command-line inputs. Conversely, Netcut Defender (the naming convention escapes us, too) is a

tool to protect yourself against the effects of netCut. Here, we list some ways in which you can use netCut and Netcut defender over your network.

## View all the IP addresses on your network (netCut)

netCut automatically scans your network and retrieves



netCut: Main interface

information on the connected machines, with dedicated tools to find a specific IP. A very good feature here is the one that allows you to choose a different network adapter in case you're using multiple ones at the same time. Basically, when you connect to a network, and open netCut, you can see a list of all the connected devices on the network, including computer, mobiles, tablets and such.

### 🔧 Clone any computer's MAC address to your own (netCut)

To clone a computer's MAC address, select a computer from the list of devices on the network. Click on 'Change MAC' in the main address. The screen will show the the IP, the MAC address and the Host Name of the device you selected. Finalise the window that you see and the MAC address of the target will be cloned to your own system.

### 🔧 Change any adapter's MAC address (netCut)

First, select an adapter to change the MAC address. This can be done by clicking on the 'Choice Netcard' button in the main interface. Then,

select a computer to clone the MAC address from, and follow the above mentioned steps. Now, when you click on the 'Change' button, the following will happen - first, netCut will stop monitoring the adapter. Then, the exchange of packets between the gateway and the PC will be stopped. Then, the MAC address of the target will be cloned to your selected adapter. Then, finally, the software will disable and then re-enable the adapter, now with its new MAC address.



Guarding against foreign attacks

### 🔧 Remotely allow and deny network access to any device on the network (netCut)

netCut can stop any device from using network resources (though it will remain connected), by making it unable to communicate with the gateway. To 'cut-off' a device from the network, first check if netCut has fully analysed the network, and is ready to

cut nodes off (there will be a ready sign placed beside the 'Cut Off' button). When it is ready, simply select the IP of the required device, and click 'Cut Off'. That will stop the device from accessing network resources. Conversely, you can allow a device to resume access by clicking 'Resume'.

### 🔧 Explicitly stop two computers from interacting (netCut)

netCut allow you to make any device listed as a node on the network a gateway. To make a computer a gateway, simply select its corresponding IP, and click the '>>' button between the list of nodes and the list gateways. Then, cut-off the other computer. For example, if you want to stop interaction between 'X' and 'Y', then make 'X' a gateway, and cut off 'Y'. Simple as that.

### 🔧 Protect your own device from ARP Spoofing (netCut)

netCut offers its own defence mechanism in itself. As in, one person with a instance of netCut installed, cannot be attacked

by another computer using netCut. You just need to click the checkbox in front of 'Protect my PC' on the main interface of the application. Straightforward stuff. It also claims defence against any generic ARP spoofing attack, though this could not be tested.

### 🔧 Protect yourself from any effects of netCut (Netcut Defender)

Netcut defender is practically anti-netCut. You can save yourself from any effect of a netCut attack by using this application. It does not require you to do anything, apparently. Just install this from www.arcai.com and basically forget about it. Effective defence is claimed from any ARP spoofing attack, too (just like netCut itself). So it basically is netCut minus the actual ability to 'cut'.

The latest version of netCut (and Netcut defender) have a very good feature built in – network refresh, or dynamic network switching; wherein you wouldn't need to restart your application when network switches frequently, like in places of public WiFi. Also, Netcut defender will tell you the identity of the person who cut you off, if he eventually manages to. Because it is only available for the PC version, the users of other network-capable devices are basically hapless prey to netCut users. Also, one major drawback of the software is that the user interface is crude, which decreases the usability. Still, as a free tool, this is as good as it gets.

## WEB APPS

The web is a vast, endless resource filled with all kinds of wonders. But if you're looking to get work done as efficiently as possible on the web, you should





## PDFMyURL turns any web page into a PDF file

check out our collection of some of the best web-apps to cater to your everyday needs. From quickly jotting down notes on the go, saving pages for later reading, or simply sharing a file with your friend, we've got it all covered.

## Share files easily with your peers

There's no dearth of ways to share files with your peers, be it the archaic email attachment, uploading to a cloud service like Dropbox or Box or a file sharing site like Fileserve. All these sites however, require you to sign up for an account. **Ge.tt** and **Minus** are two excellent web apps which make file sharing dead simple. Simple head over to their respective sites ([www.minus.com](http://www.minus.com) or <http://ge.tt>), choose the file you want to share and you'll get a shareable link that you can send to your friend. You can even drag and drop files into the browser tab and the file will instantly start uploading. What's more, ge.tt lets the recipient start the download even before the file has finished uploading.

## Save a PDF version of any webpage for offline reading

Have you ever been reading an article or filling a form on a webpage that you wanted to save for later? While Google Chrome lets you print your web page as

a pdf, this functionality is not yet available on all browsers. To remedy this, head over to [www.pdfmyurl.com](http://www.pdfmyurl.com), enter the URL of the webpage you want to save and PDFMyURL does the rest! There's also a handy bookmarklet available if you don't want to enter a URL every time.

## Quickly jot down notes on the go

If you're looking for a quick and convenient way to jot down ideas, lists and notes while browsing the web, notepad.cc is here to help. It's a very simple online notepad that lets you jot down text notes (sans any formatting or media) and gives you a shareable link to your note, so you can get back to it later. You can even password protect your notes for added security.

## Encrypt your chats

Cryptocat (<https://cryptocat.net>) is an interesting webapp that does one simple thing – it allows you to chat with others securely, as all your chats are encrypted using AES-256 encryption



Cryptocat encrypts your chat messages for you

and deleted after one hour of inactivity. Simply choose a name for your chat and invite others to join using the link. Rest assured, someone trying to snoop in on your chat won't be able to. Mobile apps for iOS and Android are also available, along with an extension for Google Chrome.

## Convert between different file formats

Every form of media including documents, images, audio, video and even compressed archives come in a variety of file formats, and compatibility between different formats can be an issue. [www.online-convert.com](http://www.online-convert.com) is a brilliant site that does just that – allows you to convert audio, video,



Readability can save pages for later reading

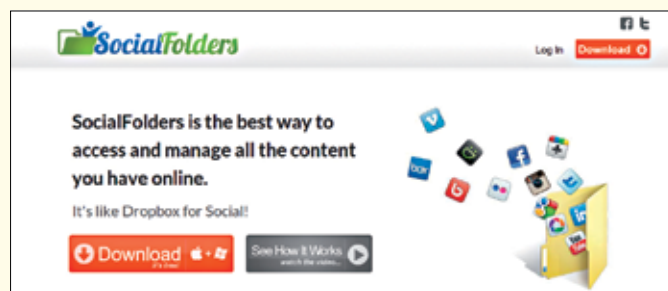
documents, images and ebooks between a bunch of different formats, all for free. It can even generate hashes for your files or text strings, so make sure you have this one bookmarked.

## Create and share screencasts easily

If you need a way to quickly create a screencast for a friend or a colleague, Screenr ([www.screenr.com](http://www.screenr.com)) lets you do so without the need for any additional install. With the click of a single button, Screenr will grab your screen's activities for you and give you a shareable link that you can share with friends.

## Save stuff for later reading

We've all been in that situation where we've come across an interesting article or video on the internet, but don't have the time to consume it right then. Pocket (formerly Read-It-Later) ([www.getpocket.com](http://www.getpocket.com)) and Readability ([www.readability.com](http://www.readability.com)) are two of the most popular apps that can come to



Backup your social accounts with Social Folders



Feedly presents your feeds in a magazine-format



your aid, saving the pages for later reading in a clean, readable format. You can mark articles as favourite or tag pages for easy retrieval. Both services are free and come with mobile apps for iOS and Android.

## Backup your social accounts

You're probably familiar with services like Dropbox and Google Drive that backup your personal files for you. What about your documents, photos and videos on sites like Facebook, Instagram, Flickr, Evernote or Picasa? Social Folders ([www.socialfolders.me](http://www.socialfolders.me)) is a service that works in a way similar to Dropbox, by creating a folder on your computer and syncing your online files in these social networks (and many more) to your desktop. It's also a handy way to cross post to different websites at once, or to transfer your data from one service to another, like moving all your photos from Flickr to Picasa.

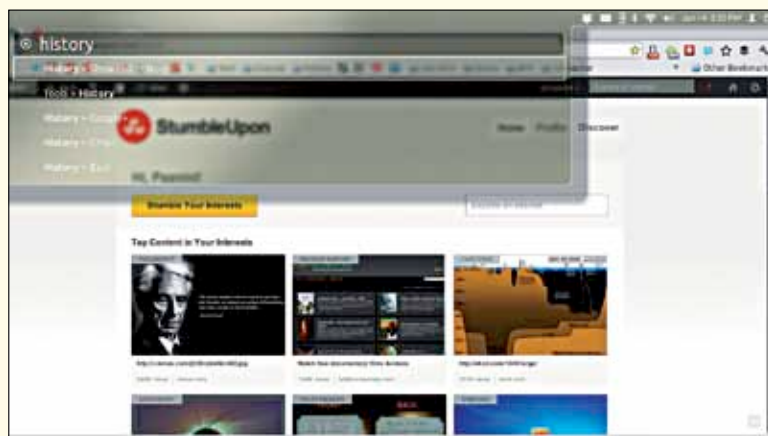
## View your news feed as a magazine

Google Reader is one of the best RSS feed aggregators around, but its default interface leaves a lot to be desired. Feedly ([www.feedly.com](http://www.feedly.com)) is an interesting service available on Google Chrome and Mozilla Firefox, that presents all your feeds from Google Reader, Facebook and Twitter in a very pleasing, magazine like format, complete with a cover page and a 'Top Stories' section. You can keep an eye on your Twitter feed, the stock prices for companies you're following or find websites and blogs similar to the ones you've already subscribed to. Feedly also has a great collection of curated content on topics ranging from home decor, visual design, architecture, news and technology. You can search for and add

feeds directly from within the app itself.

## UNITY

Ubuntu debuted its Unity shell over a year ago with the release of Natty Narwhal in April 2011. At the time, Unity was found to be slightly rough around the edges and was criticized for being radically different from any other desktop environment, hence forcing users into a new way of doing things. Thankfully, things have improved considerably from those days, and the latest iteration of Ubuntu, version 12.04 codenamed Precise Pangolin packs quite a punch. There's a lot more to it than meets the eye though, so we've compiled a list of some handy



Use the HUD to quickly perform actions

stating your 'intent' and having the application respond accordingly. Whenever you want to perform an action (say for example, bookmark a web page in Firefox), simply press the 'Alt' button to invoke the HUD, and start typing your 'intent' (in this case, the phrase 'bookmark' should suffice.) HUD searches

tions, which is not a bad thing as HUD is keyboard-based and hence, a much faster way to get things done.

## Search for videos, contacts, places and more with Lenses

On pressing the Super key (also called the 'Windows' key on



Search and Preview different kinds of data with Lenses

tips and tweaks to enrich your Unity experience!

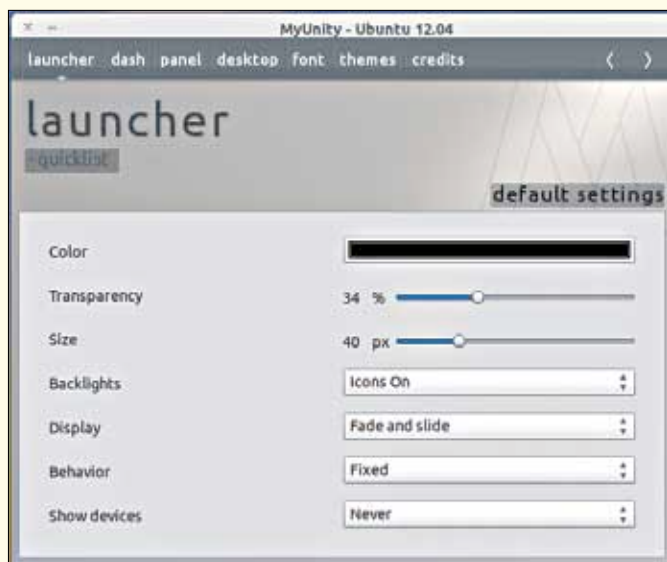
## Perform any action quickly using HUD

Many have called HUD (Heads Up Display) the single most compelling reason to upgrade to Ubuntu 12.04, and it might just be. HUD is a unique way to interact with applications by

as you type, and presents you with a list of possible choices. Find the one you're looking for and perform the task from within the HUD itself. This can be very useful if you're new to an app and don't quite know your way around yet. HUD will eventually replace the traditional menu-based navigation system in all Unity applica-

most computers, because of the Windows icon), Unity opens the dash, a place to preview, search and launch applications and files quickly. The dash however, also includes 'Lenses' that help you search for specific types of data. For eg, a video lens would search for videos on your hard disk and on Youtube, a Wikipedia lens can search for articles in Wikipedia,





MyUnity is a tool to easily configure Unity

a contacts lens will display contact information from Thunderbird, Ubuntu One and Google Contacts. Lenses are powered by Scopes – the backend that provides the searching feature. Most lenses are available in the default repository itself, so search for ‘lenses’ in the Ubuntu Software Center to install the ones you want. With Ubuntu 12.04, you can view short previews of all your content in the dash itself.

## Enable Window-Dodge for the Launcher

Mark Shuttleworth decided to remove the Window-Dodge feature of the Launcher, citing its instability. Window-Dodge is the behaviour of the launcher where it hides itself whenever it's obstructing a window, but shows itself otherwise. This lets it stay out of the way when you're working with maximized windows, but appears when you have smaller windows or you're at your desktop. You can enable this feature with a compiz plugin. Open your terminal and type:

```
sudo add-apt-repository
ppa:ikarosdev/unity-
revamped
sudo apt-get update &&
sudo apt-get dist-upgrade
```

(You may need your root password for both commands). You can set the launcher behaviour from Compiz Config Settings Manager, under the ‘Unity Plugin’. Log out and log back into see the change.

## Configure your Unity experience easily with My Unity

Among other things, Unity received a lot of criticism for its lack of customizability and configurability. Tweaking Unity was usually done by means of dconf (or worse, gconf) and was generally messy and confusing.

My Unity is a neat little application that provides a friendly GUI to configure nearly everything that can be configured about Unity, including changes to the dash, launcher and the panel. While it doesn't come installed by default, it can be easily downloaded from the Ubuntu Software Center. Or if you prefer, fire up your terminal and enter:

```
sudo apt-get install
munity
```

## View all of Unity's Keyboard Shortcuts at once

Unity has a tonne of keyboard shortcuts for power users, and if you want start using some of them, Ubuntu 12.04 has a wonderful feature where it displays all of them when you press and hold the Super (Windows) Key for 2 seconds. A translucent window pops open with shortcuts for the HUD, Launcher, Panel, Dash, Windows and Workspaces. You can even switch between applications by simultaneously pressing the Super Key and a number

key corresponding to the app in the launcher you want to launch.

## GOOGLE ANALYTICS Customising the Dashboard

To assist users and provide a friendly experience, Google has introduced the feature of Customisable Dashboards. Users can integrate various widgets into their Google Analytics interface to help



Customise the dashboard

them in tracking the website's acquired visits, goals and rate of bounces.

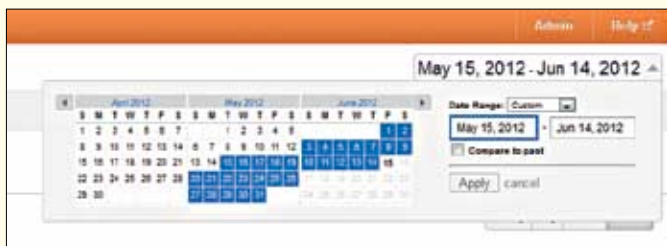
## Get an overview report

For users to check traction and compare the analytics with the



View all of Unity's Keyboard Shortcuts with the Super key





Use date ranges to get quick info

records of past months (or whatever date range user wishes to choose), it will show all the data in the overview. This feature calculates the difference and provides a quick overview of the comparison. For further use, users can easily export the data to PDF and a scheduled mail option is also available.

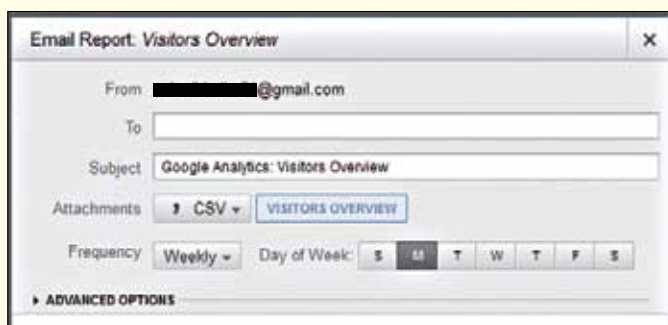
### 🔧 Use date range

To study various reports and effectively understand the trac-

option is made sticky so that if the report was set up to show the last 30 days, the next email sent out automatically will also pull the last 30 days.

### 🔧 Use Campaign Tracking

To have effective marketing on online platforms, tracking online marketing campaigns will help you get past that large number of direct visits that come from URL shorteners.



Email reports as per your preference

tion and time relation, users can use the sort by date option wisely. You can use the date range drop-down selection to select the month week or day of their choice.

### 🔧 Schedule a Report to be Emailed

To work on a website's analytics from the past records, you need to access past records. At times, you don't have access to Google Analytics account so this feature becomes necessary. With this feature, one can send reports often (daily/weekly/monthly) to people who can work on different strategies from these reports. To provide more assistance, the date range

To enable Campaign tracking in Google Analytics, one needs to tag website URLs with special parameters which can be added to links using the URL Builder tool from Google. After tagging URLs with parameters, users need to share them along with URL shortener.

To get insights of marketing campaigns, you can access it from Campaigns report, under Traffic Sources > Sources.

### 🔧 How to use Funnels

For ecommerce websites, which need to work on traction and evolve new strategies to get that; funnels is the feature to use. A funnel is the series of pages that a visitor

passes through to accomplish a goal. With the help of this feature you can track how many people start the conversion process, but don't finish it. To start with this feature, users need to fill out 'Define Funnel page' with Goal URLs in the exact order visitor follows them, eg addtocart.html, checkout.html, shipping.html, etc. After starting this feature, users shall get Abandoned Funnels report along with Funnel Visualization in user's Google Analytics dashboard.

### 🔧 How to track Intranet sites

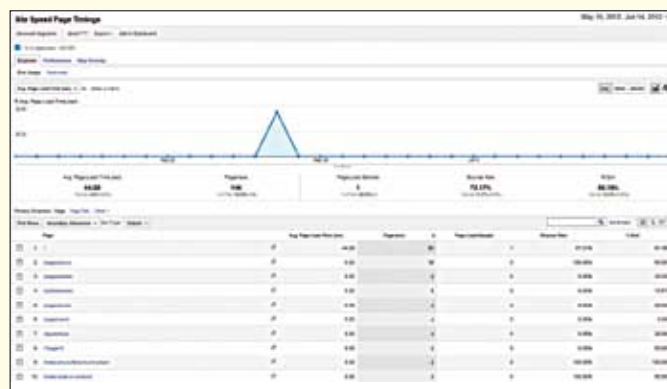
Google Analytics records all the visits/page views once it detects the tracking code on the hosted website. To enable this on intranet sites, the profile must

of Google Analytics. This feature assists the users in understanding which pages load slowly and need to be worked on for speeding up. Load speed is a ranking factor in Google and also matters a lot for websites as they play a significant role in improving the traction for the websites.

Also users can click on Performance tab and check different buckets of page load time to analyse the average load speed of web-pages.

### 🔧 In-Page Analytics

To get to know the most clicked areas of the website, users can tweak their website experience to suit the visitor's interaction with the website. In-Page feature lets you view web-pages revealing an overlay of click-



Use site speed to check load times

be detected on the user's public website initially and then users can track domain name less internet sites by using this script : Set setDomainName("none") in tracking script.

```
<script type="text/javascript">
try {
pageTracker._
setDomainName("none");
pageTracker._trackPageview();
} catch(err) {}
</script>
```

### 🔧 Enable Site Speed

To check the load time of websites, Site speed is a neat feature

through stats of on-page elements. With this feature, users can navigate through the website through Google Analytics viewing the click rate of various portions of the website.

### 🔧 Enable Custom Segmentation

To track specific users with past records, website owners can target specific ads or specific recommendations. The utmSetVar variable can be used to assign users to a certain segment to achieve the goal. For instance, you could use the variable to track users who viewed a particular page. 📌

# worldview

OUR PICK OF THE BEST TECH ARTICLES FROM AROUND THE GLOBE

## (MUST READS)



### TOUCHY FEELY ROBOTS

Robots have begun beating us on another front. Researchers at University of California's Viterbi School of Engineering have developed a 'BioTac' sensor that mimics a human fingertip, which is capable of recognising materials by feeling its textures, and other sensing parameters like material temperature. Offering new avenues in prosthetics, the prototype has already reached a stunning 95% accuracy in identifying surfaces.

<http://dgit.in/NR7VMN>

### ANSWERS TO THE CRAZIEST QUERIES

Ever had a strange question that would be too stupid to ask in public? You are definitely not alone. The good folks at LifeLittleMysteries.com have gathered (and answered) an assortment of the craziest questions. You may find your own answer there!

<http://dgit.in/LeZycM>

### SOCIAL MEDIA EXILE

CTO of TwitPic, 25 year old Steven Corona decided to go off social media for a whole month. Read this interesting account of all the withdrawal symptoms he faced and find out some of his enlightening realisations

<http://dgit.in/O2q7mB>

## (ReadWriteWeb Corner)

### HOW TO TRACK TOPICS ON THE WEB



RSS feeds may not be the best way to track topics of interest on the web. ReadWriteWeb shows you some fascinating tricks which include Google Alerts, Social Trackers, and even tips on how to track niche communities like Reddit <http://dgit.in/KnL8RC>



#### Startup accelerators fail

There are more than 200 accelerators all over the world that help startups to get from the concept stage to the product stage. But what's astonishing is that 45 percent of them could not raise venture funding for projects. Find out why.

<http://dgit.in/MmgWuD>



#### Surface Tablet already crushing dreams

By making the Surface Tablet entirely on its own, Microsoft may have affected relations with its many OEM partners. Now any manufacturer making a Windows 8 tablet is a Surface competitor. Find out more:

<http://dgit.in/KY7smq>



#### Top 10 YouTube videos of all time

Ever wonder what the most watched video on YouTube is? With great sorry we can report that it's Justin Bieber's Baby with a staggering 744,119,013 views. We can tell you this thanks to this list. Be sure to check it out:

<http://dgit.in/MF2SrA>

**WATER-BASED DISPLAY**

Scientists in Finland, have put

forth a new way to handle digital information, inspired by the water-repelling lotus leaf. The superhydrophobic surface can be used to write, re-write or store digital information.  
<http://dgit.in/MLXnfN>

**CAPTURING THE HEAVENS**

Recently, a Canadian man declared himself to be the owner of all the planets in the solar system, 'only' four moons of Jupiter, and all the interstellar space between them. Amazingly, he is not the first person to float such a claim. Read more about sky-owning whack-jobs at <http://dgit.in/KyJZLL>

**SHOULD THERE BE A CURE FOR EVERYTHING?**

We have always been trying to eliminate any and all diseases known to man. If we do end up with a cure for everything, should we use it? Read more at <http://dgit.in/Mwihuh>

**NO TIME IN SOME TIME!**

New research work suggests we might have been completely wrong in understanding the pattern of the expansion of the universe, and that with gravity pulling the expanding galaxies back inwards, time is slowing down and would eventually come to a halt.  
<http://dgit.in/L3X3nk>

## Windows Phone 8 vs. iOS vs. Android

Is it really one giant leap for Microsoft?

- By Ryan Whitwam



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Microsoft has been tight-lipped when speaking about the future of its mobile strategy. We knew Windows Phone 8 was coming, but that was about it. Late last month, Microsoft took the wraps of the new software experience for Windows Phone 8, and it's a massive upgrade over Windows Phone 7.5. So massive, in fact, that existing users are going to find themselves left in the dust.

Microsoft doesn't exist in a vacuum, though. You can't understand what a mobile operating system is worth unless you consider the competition. Let's sort out how the features in Windows Phone 8 stack up against Android 4.0 and iOS 6.

### Home screen

One of the most visible improvements in the new Microsoft phone OS is the updated home screen. The tiles are still there, but now they are more dynamic, and dare I say, usable. One of the issues with the Metro-style home screen on Windows Phone was that the promise of live tiles never really came to pass.

First-party apps did some neat stuff by showing off your pictures or social content, but third-party apps failed to take advantage. It was hard to justify adding huge tiles to your home screen that didn't really

do anything useful. The new home screen allows you to resize tiles, like the Windows 8 Start Screen, and the tiles will go all the way to the edge of the display — no more of that odd gap on the right side.

The other big change is that when the size of the tiles is changed, the data it displays will be different. For example, if your SMS tile is small, it will only show an unread count. Make it bigger, and you get the text of the message right on the home screen.

This is all very cool, but Android is still the king of ambient information with its robust widget framework. Android added resizable widgets in Android 3.0, and many of them have additional capabilities like direct playback control and flick scrolling. Android is far more customizable, but it still differentiates between icons and widgets. Windows Phone has found a way to combine the two concepts in a way that makes sense.

On the other end of the spectrum, we have iOS. Apple has resisted calls to make the home screen more customizable. In fact, the iPhone home screen experience is almost unchanged from its 2007 debut. App icons do have badges to show notifications, but that is the extent of ambient information without opening Notification Center where you have a few pseudo-widgets.

It strikes me as bizarre that the weather icon still doesn't display the current weather conditions on iOS. Maybe what Apple is saying is that it's always 73 degrees and sunny when you use an iPhone, right?

Now that Windows Phone has managed to clobber iOS when it comes to customization without losing its aesthetic charm, it's time for Apple to step it up. Android is sometimes ungainly, but still has the most customizable home screen experience.

### The core software

Much of what makes Windows Phone 8 new and different is made possible by the switch to from the Windows CE kernel to NT. That's the same code that runs at the heart of desktop Windows, including the upcoming Windows 8. Microsoft has confirmed that all the Windows Phone 7.5 apps will continue to work on Windows Phone 8, but that's where the similarities end.

Windows Phone 7 used a controlled development environment relying on Silverlight and XNA. It was easy and user-friendly, but it lacked the power that many developers wanted. There was also little to no opportunity to reuse code from other platforms. With the new OS, say goodbye to all that.

By moving to a new framework, developers will be able to make use of native code in C and C++ along with SQLite and DirectX to make better, faster apps. Microsoft's big advantage here is that developers will be able to reuse large swaths of code from desktop Windows on Windows Phone, especially on touch screen devices like Surface. Many Windows 8 programs will simply work on Windows Phone 8 without any modifications at all.



**SECURING DATA  
'LIKE A BOSS'**

RunCore, recently announced a drive that can 'self

destruct' on your command. During regular usage too, it will hide your data partitions, until it is activated by a RFID chip. <http://dgit.in/MLtGXB>

**ASSANGE MUST DIE**

Julian Assange, the founder of whistleblower website WikiLeaks, has rubbed quite a few people the wrong way. And many have voiced their opinions over the issue of his capture - they say they want him dead. Read the full list, along with their exact wishes, here: <http://dgit.in/O1NZ8S>

**WE ARE SHARK DESCENDENTS!**

New research suggests that the human race, and all the other jawed vertebrates in the world, have a common ancestor - a shark that roamed the seas over 300 million years ago! Talk about sparkling lineage. <http://dgit.in/Ni4coY>

**THE AMAZON STORY**

Jeff Bezos, founder of Amazon was never someone who thought "small is beautiful". He wanted to get big fast. Read this fascinating account of Jeff Bezos and Amazon's early rise as an online bookseller, its impact on physical bookstores, and its eventual transformation to an empire. <http://dgit.in/KYIZP4>

All of the best games on iOS and Android are written in a similar way. Apple gives developers simple tools to access the hardware in Xcode, which is why games run so well on that platform. The limited hardware ecosystem makes it easy to target devices.

Android development is a little more unusual. Android runs a modified Linux kernel at its core, but there isn't any cross-compatibility. Most apps are coded in Java, which is non-native. However, the platform does support native code for more intensive apps. Hardware differences make this a little trickier, but the support is there.

**Hardware support**

Windows Phone has taken some bruises for having limited hardware support. The system itself was reasonably fast, but users are increasingly demanding multi-core processors, HD screens, and real SD cards. Well, Microsoft is delivering on all that thanks to the previously mentioned switch to the Windows NT kernel.

Both dual- and quad-core processors are on the table, which will look nice in those spec-sheet checkboxes. I would consider the expanded resolution support to be much more significant. WVGA simply isn't going to cut it anymore, so Windows Phone 8 will also have support for WXGA (1280×768) and 720p (1280×720). That kind of panel will make the crisp lines of the OS stand out all the more. All those pixels might even make use of those beefier processors.

Android and iOS have had support for higher resolution screens for some time now. Apple famously coined the term Retina display with the iPhone 4, and Android phones since leapfrogged it with 720p screens. At this point, all three platforms have stellar screens. The only slight edge might go to Android, which has the advan-

tage of faster innovation in hardware. A 1080p phone? If you want it, Android will deliver sooner.

The NT kernel will also enable real SD card support, not that strange half-hearted unified partition method Microsoft used in the early Windows Phones. This will put Windows Phone on even footing with Android, and ahead of iPhone, which uses all-internal storage.

**Wallet and Maps and Skype**

Two new apps in Windows Phone 8 are a direct challenge to Android and iOS. Wallet, not to be confused with Google Wallet, is a unified NFC payment platform and credit card manager. This is a fusion of Google's faltering payment system and Apple's newly announced Passbook app. NFC-equipped phones will be able to interact with Isis payment systems at some point in the near future — Microsoft was a little dodgy on the details.

Bing Maps is no more in Windows Phone 8. Instead, Nokia Maps will be aboard all WP8 devices. From the Lumia phones we learned that Nokia Maps is a nice app, and this move will bring turn-by-turn navigation and offline maps to all Windows Phones. This matches what both Android and iOS are doing with their respective map solutions. Having not seen the new iOS Maps or Nokia Maps on WP8 in action, it's hard to

say who will come out on top. It's going to be the experience of driving with these systems that makes or breaks it. Android's maps are fantastic, though. Apple and Microsoft have a lot to live up to.

Windows Phone will finally have Skype properly integrated with the system. You'll still have to download the app, but it will receive calls and work with the dialer like the regular phone app. Android's system of app interoperability allows similar functionality with any VoIP app. Apple's iOS lacks proper VoIP integration, but Facetime has the video calls taken care of.

**Updates?**

Apple updates everything, but removes some features to spur device upgrades. Android has a scattershot approach to updates hobbled by carriers and OEMs. Microsoft promised the best of both systems with a unified ecosystem run by Redmond. Well, that didn't happen. We now have confirmation, once and for all, that Windows Phone 7 and 7.5 devices are not getting Windows Phone 8. Microsoft is calling do-overs again.

Android's update system is a mess, but you know going into it how bad things can be. Although, there is always the option of rooting and custom ROMs. Apple takes care of you, but really wants to make the upsell. You know that too.

Can you trust Microsoft's assurances about device updates this time around? I don't know how many Nokia Lumia 900 owners will be willing to give Microsoft the benefit of the doubt now. The bright spot may be that so few people have jumped onto the Windows Phone bandwagon that, in absolute terms, Microsoft isn't going to alienate too many people. <http://dgit.in/KQZrV4>

## CHRONICLES OF MODERN ART

The world has moved beyond considering art as simply canvas and oil stuff. Many, many art forms are now get-



ting their due recognition. And a pioneer of their popularization has been the internet. Here, we present a YouTube channel that celebrates various new, cutting-edge art forms - PBSoffbook. Their recently featured tribute to 8-bit art captured our imagination.

<http://dgit.in/LizjAk>

## (QR Code)



For a list of all the links from this section, head over to <http://dgit.in/WVJuly2012> Or point your phone to the QR code above

## (PRODUCT LAUNCHES)

### SHARP LC-90LE745U



Sharp recently released what is probably one of the world's largest LED TV. The 90-inch behemoth is not short on features, either. There is Sharp's SmartTV system for surfing the net and streaming movies, built-in Skype, and, above all, its 3D enabled. Yours for 11K.

Dollars, that is.

<http://dgit.in/LjNDc3>

### NOKIA 808 PUREVIEW



Nokia rolled out the eagerly anticipated 808 PureView. Sporting the world's highest resolution phone camera at a rating of 41MP. Then, there's NFC, 1080p video, and CD quality audio recording. The price-tag currently stands at ₹33,899.

<http://dgit.in/MLpMhv>

### SONY'S SMARTWATCH



Curiously similar to the Kickstarter project Pebble, Sony's 'SmartWatch' hit the Indian shores in June. It promises to tell you the time, alert you of new messages, and provide Twitter and Facebook control. At ₹6299, it's among the most affordable of luxuries.

<http://dgit.in/KyGIBA>

## WORDJUMBLE

E	W	T	C	V	A	R	Q	H	D	W	E	M	A	I	L	K	Z	D	J
R	F	D	O	N	E	A	N	D	A	R	A	Y	U	Y	P	M	A	E	P
A	W	R	I	D	E	I	D	U	K	P	I	X	L	K	D	Q	L	L	J
W	D	T	D	T	K	N	D	A	O	L	L	B	T	D	N	L	N	D	A
M	E	I	K	C	A	W	H	L	P	U	T	U	R	C	Y	T	L	N	Y
R	T	J	I	H	S	J	L	B	G	T	B	O	A	E	E	B	L	I	T
I	G	R	C	J	W	O	P	A	F	Y	E	D	B	E	D	R	V	P	I
F	B	C	Y	N	O	G	E	N	M	O	D	R	O	I	F	N	I	S	N
V	Z	R	E	L	P	E	K	D	P	A	N	G	O	L	I	N	U	D	I
D	R	A	O	B	P	I	L	F	N	L	Y	L	K	H	R	C	M	H	R
B	A	N	D	W	I	D	T	H	G	A	I	N	S	F	E	E	O	S	T
Y	D	I	A	L	U	P	D	E	D	A	B	M	A	S	W	D	D	H	H
Z	E	L	D	N	I	K	A	N	N	E	T	N	A	C	I	Y	E	E	D
X	K	N	M	O	U	N	T	A	I	N	L	I	O	N	R	G	M	O	S
S	U	R	F	A	C	E	M	O	S	F	E	T	S	X	E	D	O	C	X

ABSOLUTE  
TIMEPASS

There are close to thirty tech terms in this jumble. Try and find as many as you can!

## Top 3 YouTube Picks

Make sure your boss doesn't catch you goofing off with one of these playing on your screen



### Apps for apes!

Duration 06 min, 27 sec

Science has decided the way forward, apes must have iPads!  
<http://dgit.in/MC5kkV>



### DeeChee

Duration 04 min, 24 sec

This robobaby is being taught to learn - like an human child.  
<http://dgit.in/Pr1pcO>



### Every known star and galaxy

Duration 06 min, 31 sec

This video demonstrates our Universe very, very beautifully.  
<http://dgit.in/Mpb6bY>



Interview with  
Danny Winokur, VP  
and GM, Adobe Inc. Go to  
pg. 80. For complete  
interview visit:  
[dvwx.in/jul-12-dwa](http://dvwx.in/jul-12-dwa)

# > code / creativity / community >

# devworx >



## iOS emulators are here!

Not many people have breached Apple's ecosystem without brutally jail-breaking it – though some have indeed come close. And now, we see some coming close

enough to be mentioned here. The first project is 'Magenta', by a relatively unknown developer who goes by the name Christina. She's trying to achieve binary compatibility

between her code and iOS 5.0 by using Darwin over a basic core of a Linux kernel. Because everything is compiled for the fabricated vanilla Darwin, nothing needs to be prepared separately for the underlying Linux base, except for the libC (the C library), which acts as a bridge between the user and the kernel. The code is open source – feel free to take a look at <http://crna.cc>.

Another similar project, iEMU, started off as a simple app emulator, and is slowly becoming a complete and comprehensive idea, which can even load the iOS kernel. The project is one of the success stories of community funding, with the current status being very promising. The central idea is to replicate the working of Samsung's S5L8930 chipset, which forms the core of almost the entire existing Apple device range. They are also aiming for reflashing support via iTunes. You can learn more about the project at <http://www.iemu.org>.

Read the entire article at  
<http://dvwx.in/MB0KkI>

### \*side panel



#### \*Long way for Retina apps

>>According to developers, it could be quite a while before apps find themselves on Apple's Retina display, and users would be able to achieve the user experience promised by Apple.

<http://dvwx.in/PyINHt>

#### \*New in Sencha.io

>>The folks over at Sencha have focussed at making the underlying API and SDK easy to work with.

<http://dvwx.in/MjILRw>



#### \*HTML5 webcam support in Opera 12

>>With version 12, Opera has added a host of new features in its browser, that could mimic a full fledged app.

<http://dvwx.in/L7kg8h>

### \*footer

#### \*Server side app development

>>Applicasa, a new company that offers a one-stop-shop, server-side solution for mobile app developers has begun offering an Android version of its web-based service. Applicasa's solution enables developers and brands to quickly build server-side mobile apps offer a rich set of cloud-based features and functionalities.

<http://dvwx.in/NSDQeB>



#### \*Google HACK 2012 - code for a cause

>>Braving the sweltering heat of June, around a hundred odd developers gathered in New Delhi – to code towards a social cause.

<http://dvwx.in/M8uIzR>

#### \*Facebook-WordPress integration

>>Facebook recently unveiled a plugin for the WordPress blogging tool that offer expanded integration between the two. The move will put Facebook widgets on more pages around the Web and will likely increase content sharing on Facebook. WordPress is used to create 17 percent of all Web content, according to Facebook's announcement, accounting for 600 million unique visitors a month.

<http://dvwx.in/NSLtlj>



For latest news, updates and features, join us on Facebook at  
[facebook.com/devworx.in](http://facebook.com/devworx.in)



# Get started with jQuery Mobile

>jQuery Mobile is an expansion, or plug-in, for jQuery that enables you—the developer—to build mobile-centric UIs. We show you how> by Kshitij Sobti

jQuery is a framework that simplifies common JavaScript routines and operations. It requires knowledge of JavaScript and by itself only provides core routines that can be used to build your own apps. The jQuery Mobile framework builds on jQuery, and realises a simple HTML page as a dynamic touch-friendly web page. Yes, all jQuery mobile needs from you is a standard HTML page with all your data, which it will then translate automatically into an Ajax-driven mobile- and touch-friendly web application.

To keep it simple, we'll look at creating a "things to-do" app using jQuery Mobile. You will only be able to add items to the list. But before we begin, here's a look at basic jQuery Mobile concepts.

## How jQuery Mobile works

While jQuery expects no formal structure from your HTML code, and can be used to build pretty much any kind of web application, it now has a more narrow goal and approach. It expects your pages to include specific attributes that define how it will function.

In a jQuery application, you will assign certain roles to different elements in your HTML code. One role is that of `page`, complete with header, footer and content. Assign it a `button` role and a link quickly becomes a button. Similarly you can apply a `listview` role to turn an ordinary list into a rich touch-friendly clickable list.

When you include jQuery Mobile in your code, it does a number of things. It looks at all the HTML elements to which you have assigned roles and other attributes, and it automatically enhances them based on your settings. It also converts all your links to AJAX driven links so instead of loading a refreshing the page and loading a new link, it just loads the link in the same page, which makes your web site all the more like a dynamic app.

While jQuery Mobile does make your web site more dynamic, it expects a static page to begin with. If you have a static page with properly defined roles, jQuery will automatically enhance it and make it dynamic. If however, you have content on your page that changes after you have loaded the page, for example pulling items from a news feed or such, it will not work out of the box, but will need some JavaScript code.

## jQuery Mobile Boilerplate

Let's get the boilerplate jQuery Mobile code out of the way. This code sets up your application, and includes the standard jQuery and jQuery Mobile CSS and JavaScript code. Here it is:

```
<html><head><title>My Todo App</title>
```

```
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="http://code.jquery.com/mobile/1.1.0/jquery.mobile-1.1.0.min.css" />
<script src="http://code.jquery.com/jquery-1.7.1.min.js"></script>
<script src="http://code.jquery.com/mobile/1.1.0/jquery.mobile-1.1.0.min.js"></script></head><body></body></html>
```

Here we have linked the files directly from the jQuery website so it will just work.

## Adding a page

A page is a basic component of jQuery Mobile app. A single HTML file / app can define multiple pages, and navigate between them.

Inside the body tag here we will define a page. A page can have a header, content area and footer. The header area can have a title, and even buttons if you like. The footer could have a toolbar for switching between pages or views. Here is a simple page:

```
<div data-role="page" id="home">
<div data-role="header"></div>
<div data-role="content"></div>
<div data-role="footer"></div></div>
```

Here the page is defined by a simple `div` tag, however it is given a `data-role` attribute that is set to "page". We have also assigned an `id` of "home" which will come in handy for navigation.

## Adding the Todo elements

Our todo app is simple, it just needs a text area for entering a todo item, a button for the adding it, and a list. We will add the text input and button to the footer, while the list of items will be in the content area.

jQuery Mobile automatically enhances most form elements to make them work better on touch screens. It will convert any any links in the header or footer to buttons. For buttons in the content area, you just need to add a link with the `data-role` attribute set to "button". You can even add an icon for the button by adding the `data-icon` attribute and setting it to one of the the icons that ship with jQuery Mobile.

To add a text area and button to the footer we add the following code to the `div` with the footer role:

```
<input type="text" name="todoitem">
<a data-icon="plus" data-role="button">Add</a>
```

Now let's add the list to the content area with the following code:

```
<ol id="todolist" data-role="listview"></ol>
```

Setting the `data-role` attribute to "listview" will format the list in the jQuery style.

### Wiring it all up

The code needed to make this all work is quite simple. All we need is a function to add the content of the input to the list. Here is the code for that function: `$("#todolist").append("<li>" + $("#todoitem").val() + "</li>");`

After we have added the item to the list, it is best to clear the text area. We can do that with with the following code: `$("#todoitem").val("");`

Another important task we need to perform in this function is to refresh our list. jQuery Mobile runs once over you HTML code enhancing everything on the page, however, if you add content to your page afterwards, it will not automatically be enhanced. To enhance the newly added stuff, we need to call the listview's refresh function. We can do that with the following code:

```
$("#todolist").listview('refresh');
```

We take all this code, and put it in a function called `add_item`. We can then link our add button to this function and we will have a functioning todo app! Just add the attribute `"onclick='add_item()'"` to your add button and you are done.



Your tasks listed



Adding a new task

### Enhancing our example with a dialog

Having the input for entering a Todo item right at the bottom of the page makes sense, and is quite convenient. It does not look that good however. Let us break off the adding mechanism to its own dialog, so when click on a button to add a Todo item it will show a dialog box with a text input area.

For this we will remove the footer area and instead add another page to our code. You can copy paste the code of the button and the text input area into the page for the code. Here is the code for the added page:

```
<div data-role = "page" id = "additem">
  <div data-role = "header">
    <h1>Add Item</h1>
  </div>
  <div data-role = "content">
    <input type = "text" name = "todoitem" id
= "todoitem" />
```

## \*pointers

>>Nuggets of cool code at work



### \*Sixth grade app developer

>>Thomas Suarez, a 6th grade student in the South Bay area of Los Angeles began to develop and sell his own iOS applications.

Duration > 06:27

<http://dvwx.in/KVNvwK>



### \*Build a custom ROM

>>This video comes from a section of Marakana's Android Internals Training Course, which includes Educational resources on Android Development.

Duration > 01:16:21

<http://dvwx.in/NXjiCS>



### \*Cloud services for Windows...

>>Chris Jones, Corporate Vice President, Windows Live Team shares all the new features and interface changes in the PC and Phone OSes highlighting the cloud.

Duration > 07:30

<http://dvwx.in/NmtEJY>



### \*Make Money from your iOS application

>> Mobclix's Sunil Verma talks on monetising iPhone apps at an iPhone Developer Camp.

Duration > 06:41

<http://dvwx.in/Lid4N0>

```
</div>
```

```
<div data-role = "footer" data-position =
"fixed">
```

```
<a href = "#" data-icon = "add" onclick =
"add_item()" data-role = "button">Add</a>
```

```
<a data-icon = "delete" href = "#home" data-
rel = "back" data-role = "button">Cancel</a>
```

```
</div>
```

```
</div>
```

We will show this page as a dialog that has a title of "Add Item", a text entry area in the middle and a footer area with cancel and add buttons.

At this point you should have removed the old footer from the previous page. Instead we will add a button to the top header that shows this dialog. The code for that is as follows:

```
<a data-icon = "add" href = "#additem" data-rel
= "dialog">Add</a>
```

That's it! Now your app will have an add button in the header, which when clicked will launch a dialog that lets you enter a todo item. You can dismiss that dialog or enter and add an item.

We would also want to dismiss the dialog once the item has been added to the list. So we have to add one more line of code to the `add_item` function: `$('#additem').dialog('close');`

This will close the dialog once the item has been added.

### Searching in lists

Here is another remarkable small addition that adds a big feature to the app. jQuery Mobile includes a powerful feature that allows you to quickly filter items in a long list. If you have hundreds of todo items, this feature will let you filter items in the todo list. Adding this feature is a simple matter of adding a `data-filter` attribute to the list, and setting it to "true".

### Conclusion

In this article we have covered the basics of how to use jQuery Mobile to create lists and buttons, interlinked pages, dialogs, and more, however there is a lot more than jQuery Mobile offers. If you have an existing blog or content-driven website that needs a mobile version, you can quickly get started with jQuery Mobile and even theme it to your liking. You can combine it with PhoneGap / Apache Cordova to create applications for mobiles and tablets.

It does however strongly lean towards converting news / blog / content-driven websites for mobile audiences, and isn't really the best base for that web-based image editor you wanted to make.

For the source code of the app, go to [dvwx.in/LaKJlq](http://dvwx.in/LaKJlq).



## >>“Flash is growing in areas of gaming and video”>>

>>Danny Winokur, VP & GM, Platforms, Adobe

### How has Adobe been handling the transition from Flash to HTML5?

Realising the growing presence of HTML5 in the web, Adobe has pulled back on its Flash development slightly. Rather than focussing on developing Flash for multiple platforms, Adobe is trying to better integrate Flash with desktop browsers. Flash development cannot be ignored completely in favour of HTML5 as there are still quite a few things that can be done better and faster using Flash. However, two areas where Flash is seeing an increased adoption is in the areas of advanced gaming and premium video. Many Chinese gaming companies have invested heavily to create Flash-based games that run inside browsers, and these games are just as stunning in terms of their visual quality and graphics as a native game on a console.

### How has PhoneGap's acquisition changed things?

One key area where Adobe is working on, is expressivity on the web, to enable designers to create web sites and web applications that are as expressive as their imagination permits. In this field, we're combining our experience in building desktop applications along with the added expertise in mobile platforms after acquiring PhoneGap.

### Tell us more about Adobe's new service, Shadow.

We recently previewed a new service called Adobe Shadow, which lets you connect to up to 25 devices at once and test your web site/application on all of those devices, particularly from the point of view of responsive web design.

Read the entire interview online at [dvwrx.in/jul-12-dwa](http://dvwrx.in/jul-12-dwa). Join us on [fb.com/devworx.in](https://fb.com/devworx.in) and share your comments.

## \*event highlights >> Leaders can leverage the technology talent pool in India



The event served as a platform to learn aspects of the Indian IT talent pool

>>“Project Praviin” is IBM’s initiative that provides IBM Technical Training and Certification infrastructure in India for building skills in academia. Project Praviin is an innovative program launched under the aegis of IBM Academic Initiative worldwide to partner with colleges and universities in India to better educate millions of students for a more skilled and competitive IT workforce. IBM currently has a network of 150+ Centres of Excellence (CoE) training centres that are focused on imparting relevant education and training to students.

The event held on June 8th, at Hotel Hyatt Regency, New Delhi was moderated

by Anil Menon, Director - Marketing and Communications, IBM; and included an array of attendees such as Sandhya Chintala, Executive Director, NASSCOM, and Pranav Singh, Director Engineering, Aricent Group. It served as a platform for IBM to interface with the industry and learn of challenges in matching the skill sets of their IT work force in a real-world scenario. Getting first hand feedback on the challenges related to training, deployment of new technologies and project management would assist IBM to create the most relevant and updated curriculum. For more details visit: <http://dvwrx.in/KphbRj>

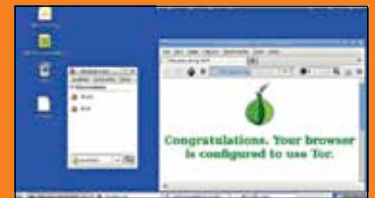
## \*distro dose



### SystemRescueCD

>>SystemRescueCd is a Linux system rescue disk available as a bootable disc or USB stick for administrating or repairing your system and data after a crash. It provides an easy way to creating and editing the hard disk partitions:

<http://dvwrx.in/jul-sysrescue>



### Tails

>>Tails is a Debian-based live CD/USB with the goal of providing complete Internet anonymity for the user. The product ships with a web browser, IRC client, mail client and instant messenger, all pre-configured with security in mind. Go to:

<http://dvwrx.in/jul-tails>



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## 150Mbps Wireless N Router TL-WR740N



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**Motherboard shootout****88**

19 Z77 motherboards duke it out in this month's motherboard comparison. Which is the right one for you?

**Budget smart phones****94**

On a tight budget but still on the lookout for a smart phone? We give you the lowdown on 8 such phones

# Wireless Warriors

We put 20 routers through their paces. Read on to find out which one is the right pick for you and also get some pointers on setting up a home network

Anirudh Regidi  
anirudh.regidi@thinkdigit.com

**T**he sheer number of wireless devices at our disposal is staggering. That, coupled with our data consumption rate means that the bandwidth we require has gone through the roof. Gone are the days of DVD video and just checking your mail on your phone and PC, we want to watch HD movies, browse YouTube on the go, indulge in multiplayer gaming, etc.

It doesn't stop there, these same wireless devices have also managed to clutter up the airwaves. Most of them operate in the 2.4 GHz band and will interfere with your network. Because of this, we're slowly seeing

a shift to dual-band routers. These routers can stream on both the 2.4 GHz and 5 GHz band, which, while suffering less interference, also results in a drastic drop in range and penetrative power. Also, your receiver needs to be capable of receiving that 5 GHz signal.

There is a lot more to routers than just buying a device that looks "nice" or claims to have a lot of features though. You need to consider your usage, the number of wireless devices that you want to use, your RF (radio frequency) environment, device positioning, receiver capabilities and numerous other criteria. During this test we learned many things ourselves and will share that knowledge with you and help you to choose

the correct router as well as to setup a wireless network.

## SETTING UP A NETWORK

The first and most important step in setting up your Wi-Fi network is determining what sort of receiver you have. Just because you have a 600N dual-band router doesn't mean that your receiver can actually receive that signal. Check up the model number of your receiver online or in your user manual, etc. to determine the capability of your device. You might see 2x2 or 1x2, etc. written alongside your receiver specs, these numbers indicate the number of transmit

and receive antennas that your adapter uses respectively. Usually, the more antennas the adapter has, the higher the total data throughput. Ensure that you count antennas per band as this will determine your actual data throughput per band. Simply put, a 1x2 adapter can receive better than it can transmit, which is perfectly fine if you want to stream data to your device, rather than from it. As an example, a media server requires better transmission, an HDTV requires better reception, setup your systems accordingly.

Location is another important factor to consider when setting up your router and





## F\*\*k you NVIDIA

Linus Torvalds, the founder & the chief developer of linux is now in the news for having said "F\*\*k you" to NVIDIA.

receivers. While RF devices do not need line-of-sight (LOS) to operate, they do perform better if they have LOS with each other. This is especially true of the 5 GHz band, which loses out on penetrative power. Also, we placed one of our test receivers (Endpoint 6), between 2 printers and a table fan, about 40 feet from the router and as expected, the signal strength and performance of that end-point was barely passable. Most devices failed to connect to it despite having the best receiver in our tests. End-point (EP) 5 was placed directly opposite EP 6, without any large, metallic objects around it, and performed quite a bit better than latter device. Another important point to note is that EP 4, which had the same wireless adapter as EPs 1 and 2, fared quite badly despite being positioned just a few feet further in Zone 2. EP 3 handled the same data far better than EP 4 due to the better receiver it housed.

## SINGLE BAND ROUTERS

These are routers capable of transmitting and receiving in only the 2.4 GHz band. We had 12 routers in this category, with prices ranging from ₹1,100 to ₹6,500. Most of these routers supported upto 300Mbps and proved themselves quite capable in our tests, some of them, such as the TP-Link TL-WR841N, even giving the dual-band routers a run for their money.

## FEATURES AND SPECIFICATIONS

Speaking in terms of design, the ASUS routers had a funky black theme, which was very similar to the nokia "Prism" series of phones which were popular some years ago. Among these routers, the ASUS RT-N15U

## HOW WE TESTED

We got a range of devices for testing, ranging from 150N routers, all the way upto 900N capable devices. To load these devices as much as possible we decided to setup 6 end-points each capable of a minimum of 150 Mbps wireless connectivity. The test setup is as follows:

**Server:** Intel Core i5- 2500k, ASUS P8Z77 V-PRO, Kingston Hyper X SSD- 240GB, 2GB RAM

**Endpoint 1:** Intel Core i7- 875k, 2GB RAM, D-Link DWA-525 N150 wireless adapter.

**Endpoint 2:** Intel QX9650, 2GB RAM, D-Link DWA-525 N150 wireless adapter.

**Endpoint 3:** Intel Q6600, 4GB RAM, D-Link DWA-525 N150 wireless adapter.

**Endpoint 4:** Dell inspiron 13R, Intel Core i5- 2430M, 2GB RAM, Intel Centrino n 1030 adapter.

**Endpoint 5:** Dell XPS 14Z, Intel Core i5- 2430M, 4GB RAM, Intel Centrino Advanced n6230 adapter.

**Endpoint 6:** Dell Alienware M14x, Intel Core i7- 2720M, 6GB RAM, Intel Centrino Advanced 6205 adapter.

All PCs were setup to run Windows 7 Home Premium and Ultimate. The TamoSoft throughput test was used to measure the throughput on all devices. The server was connected directly to the router via an ethernet cable and each router was configured to run only in 2.4 GHz mode (where applicable), at it's highest supported throughput. Each laptop was configured to run in high-performance mode, with power saving off and PCI Express link state management turned off. All other network connections were disabled on every PC, while it was being tested. The routers were reset to their factory defaults, where required. No other settings were modified other than the SSID, WPA2 passcode and LAN settings.

was the only one with internal antennas but considering the price, it's only worth going for if you really love the design and/or need the USB ports on offer. USB with UPnP support was found on 3 of the routers in our tests, but came with an exorbitant price tag, especially so in the case of the ASUS routers (RT-N16 and RT-N15U). The Buffalo WCR-HP-G300 was another unique router featuring probably the largest and

most powerful antenna (8dBi) that we had in our tests.

Coming to the interface design, all the routers in this category have simple and functional interfaces. We found the interface used by ASUS to be quite informative using a simple graphical representation to show connected devices. Essential features such as wireless SSID, etc. were also present on the home screen itself. TP-Link's interface was also

simple and clean, some might say overly simplistic, but functional nonetheless. Another important point to note is that the TP-Link and ASUS routers were the fastest to setup and connect. It isn't that the other routers are bad, it's just that while the other routers may have taken 2-4 minutes before they were detected, the ASUS and TP-Link devices responded almost immediately. This is a very minor point though, and

### Full load testing

For this test, all the PCs were placed within a 10 foot radius of the test router, TamoSoft servers were run on each of them and the network was put under simultaneous load from all six PCs. The average up and down throughput speeds were noted after five minutes.

### The remaining tests

For these tests, the end-points were placed in different zones, classified as follows.

**Zone 1:** Endpoints 1 and 2 within 10 feet of the router

**Zone 2:** Endpoints 3 and 4 between 10 and 20 feet from the router

**Zone 3:** Endpoints 5 and 6 at around 40 feet from the router.

### Distributed load tests

The TamoSoft throughput test was again conducted on all the end-points and average upload and download speeds were noted.

### Real world tests

**File transfer:** This test were conducted using a single 100MB file and around a 1000 assorted files totaling a 100MB in size. Transfer times were noted.

**Video streaming:** This test were conducted using a 1080p MTS file with a 26000 kbps bit rate. The time to play the clip was noted and points were cut for every second extra over the actual length of the file. This bit-rate is extremely high, but a router that can smoothly transmit such a signal can easily manage to stream video directly from most portable video recorders.

**Ping:** The average of 20 ping intervals were noted. Higher points were given for lower pings.

**Signal-strength:** This was noted using the PassMark WirelessMon utility. A higher-weightage was given to signal strength in farther zones.



Single-Band routers									
Brand	ASUS	ASUS	ASUS	Buffalo	D-Link	D-Link	Digisol	Digisol	TP-Link
Model no.	RT-N10+	RT-N16	RT-N15U	WCR-HP-G300	DIR-605L	DIR-600L	DG-BR4000NG	DG-BR4300NG	TL-WR841N
Price (Rs)	1,450	6,500	6,000	4,500	2,499	1,499	1,225	1,950	2,000
Performance score (out of 60)	12.43	14.08	12.70	13.31	16.74	17.10	12.88	17.56	20.12
Features score (out of 40)	13.73	15.29	11.37	7.45	7.45	8.24	5.02	5.81	9.80
Total score (out of 100)	26.16	29.37	24.07	20.76	24.19	25.34	17.90	23.37	29.92
Performance Tests									
Full load (Mbps up/down)									
Endpoint 1	20/12	18/22	17/20	24/14	21/26	22/26	21/31	32/44	42/40
Endpoint 2	19/11	18/21	15/22	26/25	33/34	35/31	35/41	43/43	45/41
Endpoint 3	12/10	14/19	14/12	18/11	19/16	22/16	10/14	14/16	28/17
Endpoint 4	6/3	14/19		14/9	24/26	26/24	25/25	30/44	40/35
Endpoint 5	17/10	24/19	19/19	31/17	35/24	27/23	13/17	31/23	45/27
Endpoint 6	16/11	17/28	15/22	30/19	31/29	24/18	12/17	22/31	51/40
Distributed Load (Mbps)									
Endpoint 1	18/17	3/1	8/2	14/11	19/21	23/14	7/2	50/34	37/15
Endpoint 2	7/1	6/13	12/20	7/2	20/21	26/27	6/0	41/25	35/16
Endpoint 3	10/6	0/0	9/9	9/6	12/13	15/9	7/5	20/12	22/15
Endpoint 4	8/3	10/7	11/14	2/2	15/17	15/19	1/0	30/34	23/35
Endpoint 5	0/0	0/0	19/15	14/0	13/15	23/18	1/0	7/2	38/28
Endpoint 6	1/1	2/0	4/4	1/1	8/7	3/0	0/0	2/0	1/0
File Transfer (100MB) Sequential / Assorted									
Endpoint 1	19/34	54/64	20/34	16/31	20/37	22/52	23/41	12/30	13/27
Endpoint 2	28/28	67/55	21/31	19/30	19/30	22/38	19/32	12/22	11/20
Endpoint 3	29/40	63/105	22/51	30/36	20/41	21/36	26/42	35/52	13/27
Endpoint 4	50/59	54/122	65/121	115/157	47/82	33/70	99/F	98/65	18/63
Endpoint 5	19/38	29/60	34/65	24/51	19/41	25/34	71/82	43/62	17/36
Endpoint 6	F	31/60	77/84	F/F	43/85	29/53	115/139	197/91	75/82
HD Video Streaming (24sec)									
Zone 1	26/24	27/94	30/56	24/54	24/57	29/79	40/57	26/62	24/48
Zone 2	26/26	27/30	28/57	30/58	32/65	26/29	40/126	29/25	25/30
Zone 3	28/F	27/176	27/F	31/265	30/137	25/107	78/210	38/199	30/37
Ping (ms)									
Zone 1	0/0	2/3	0/0	0/0	1/1	1/2	1/1	20/1	0/0
Zone 2	3/1	8/1	12/590	4/5	1/1	3/1	2/1	2/3	0/0
Zone 3	3/F	3/5	22/19	5/6	3/8	3/3	25/15	40/7	4/2
Signal Strength (%)									
Zone 1	57	60	58	45	59	57	48	53	59
Zone 2	54	65	58	38	52	46	46	46	42
Zone 3	48	47	30	25	27	38	35	30	35
Features									
Total LAN ports/ Gigabit ports	5/0	5 / 5	5 / 5	5/0	5/0	5/0	4/0	4/0	5/0
Antennae (External/Internal)	External	External	Internal	External	External	External	External	External	External
No. of Antennae	1	3	2	2	2	1	1	2	2
Antenna gain (dBi)	5	2	3	8	5	2	3	3	5
Total USB/USB 3.0	0	2/0	1/0	0	0	0	0	0	0
Data Rate (Mbps)	150	300	300	300	300	150	150	300	300
Wi-Fi Hardware Switch	N	N	N	N	N	N	N	N	N
Inbuilt ADSL2+ modem	N	N	N	N	N	N	N	N	N
SD Card Slot	N	N	N	N	N	N	N	N	N
IPv6 support	N	N	N	N	N	N	N	N	Y
Multiple SSIDs	Y	N	Y	Y	N	Y	N	N	N
Parental / Access Controls	Y	Y	Y	N	Y	Y	N	N	Y
UPnP	Y	N	Y	N	Y	Y	Y	Y	N
VPN Support	Y	Y	N	Y	Y	Y	Y	Y	Y
WPS Button	Y	Y	Y	N	N	Y	Y	Y	Y
Warranty (years)							NA	NA	
DD-WRT/Tomato support	Y/N	Y/Y	N	N/N	N/N	N/N	N/N	N/N	N/N

			Dual Band routers							
TP-Link	TP-Link	TP-Link	ASUS	ASUS	ASUS	Belkin	D-Link	D-Link	Netgear	SMC
TL-WR740N	TL-WR1043ND	TD-W8951ND	RT-N56U	RT-N53	RT-N66U	N750DB	DIR-827	DIR-636L	WNDR3700	SMCWGB-R14-N2
1,100	4,300	2,000	8,700	6,500	13,500	8,699	10,999	4,999	10,625	6,000
13.17	17.56	15.16	10.32	13.36	19.53	15.17	15.16	17.40	17.75	18.65
9.80	13.73	12.08	20.00	13.73	26.27	16.63	17.65	15.29	19.22	12.47
22.97	31.29	27.24	30.32	27.09	45.81	31.80	32.81	32.69	36.97	31.12
30/26	44/47	39/22	25/20	17/17	19/26	38/27	15/24	27/22	36/37	55/54
18/29	47/42	35/26	22/14	15/20	19/24	33/28	16/24	37/30	41/36	59/52
14/18	32/16	12/11	11/8	11/16	17/21	27/14	13/14	21/14	36/15	37/20
21/21	27/25	10/10	6/4	12/19	14/20	34/12	11/16	22/15	21/30	38/33
14/20	38/24	16/11	27/15	14/14	26/52	47/17	31/28	43/27	30/24	40/31
14/23	31/22	18/15	20/12	13/19	17/34	39/23	24/35	28/16	43/32	52/42
31/26	40/29	16/34	19/10	22/20	21/22	10/3	19/21	20/8	28/18	41/27
29/25	37/29	21/17	14/7	20/27	21/25	8/1	19/23	22/17	27/20	51/38
10/13	30/15	12/9	9/0	8/11	16/20	0/0	16/18	13/7	16/14	32/16
11/16	3/0	10/6	7/3	12/29	14/13	4/1	2/0	8/7	8/17	20/14
10/6	3/1	13/10	0/0	10/6	20/18	0/0	10/16	14/11	9/9	18/5
1/0	6/3	1/0	2/0	6/1	16/10	1/0	5/4	8/4	1/0	2/0
11/29	11/22	11/28	20/33	11/53	18/32	29/39	19/33	19/58	20/35	17/27
13/34	13/23	20/29	26/31	14/39	17/27	23/25	18/33	23/39	21/27	19/22
24/51	12/20	20/35	17/44	17/38	12/28	12/28	18/24	19/40	20/26	19/27
21/111	18/49	40/93	28/61	90/105	2/56	31/68	14/252	44/126	83/240	44/74
29/57	18/38	23/38	36/55	61/78	15/37	19/38	18/35	10/44	22/33	19/32
F/F	49/51	142/132	57/84	127/F	25/32	41/67	94/72	42/74	54/270	77/55
25/50	24/45	24/60	29/50	24/65	24/25	24/43	24/51	24/120	35/42	24/47
31/37	21/54	25/38	25/29	28/93	24/26	24/30	24/121	24/59	24/100	24/36
F/F	26/107	28/127	34/158	63/227	24/67	24/93	24/94	25/154	30/F	94/147
0/0	0/0	0	0	2	0	0	1	0	0	0
2/0	1/0	8	167	19	2	2	16	2	5	2
15/F	1/3	29	44	28	58	37	28	50	29	31
50	61	58	62	58	67	68	56	71	55	37
36	44	52	55	43	61	59	40	56	46	50
14	35	29	44	28	58	37	28	50	29	31
5/0	5/5	4/0	5/5	5/0	5/5	4/4	5/5	5/5	5/5	5/5
External	External	External	Internal	Internal	External	Internal	Internal	Internal	Internal	External
1	3	1	'2/3	'2/2	3	5	NA	NA	NA	3
5	3	5	3.8/5.1	2.5/4	'3/5	NA	NA	NA	NA	3
0	1/0	0	2/0	0/0	2/0	2/0	'1/1	1/0	1/0	1/0
150	300	150	900	600	900	750	600	300	600	300
N	N	Y	N	N	N	N	N	N	Y	N
N	N	Y	N	N	N	N	N	N	Y	N
N	N	N	N	N	N	N	Y	N	N	N
N	Y	N	Y	N	Y	N	Y	Y	Y	N
N	N	N	Y	Y	Y	N	N	N	Y	Y
Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y/N	Y/N	N/N	N/N	Y/N	Y/N	N/N	N/N	N/N	N/N	N/N



### iPhone on prepaid?

Cricket Wireless is now offering a \$55 monthly prepaid plan for the iPhone 4S. <http://dgit.in/KeAIDW>



### Max Payne on Android

Max Payne, Rockstar's most award winning game is now available on Google Play store for ₹166. <http://dgit.in/KVWDzu>

only of relevance if you like to keep fiddling with and resetting your router.

## PERFORMANCE

The internal antennas on the ASUS RT-N15U did impact the performance of the device. The hit in performance wasn't too bad, but enough to make the ₹6,000 price tag unjustified, especially when you consider the stellar performance of the TP-Link WR-841N, which had literally double the performance of the other routers in our test. At ₹2,000, this is real value for money. In fact, the performance of the TP-Link WR-841N was way better than most of the routers in our tests, dual-band included. Only the ASUS RT-N66U, at six times the price, managed similar performance. In fact, the performance of all the TP-Link routers was exceptional in all our tests, so much so that we can quite safely say that if you want a single-band router, get one from TP-Link (not considering aesthetics of course).

### Winners

The **Best Buy** award here goes to the **TP-Link TL-WR740N**, a cheap, no-frills router, this one performed admirably in our tests, especially considering that it was also the cheapest router in our test. The build



TP-Link TL-WR740N



Netgear WNDR3700

may not be as good as some of the ASUS routers, but the performance and price more than justify the award. The **Best Performer** award again goes to a TP-Link router, this time it was the **TP-Link WR-841N**. Why the award? The performance of this router was simply stellar in this category and none of the other devices even came close. The tables speak for themselves. Dual-band performance at ₹2,000? Why not?

## DUAL-BAND ROUTERS

This category had only eight devices, three of which were from ASUS, the rest from D-LINK, Netgear, SMC and Belkin. TP-Link did not have any router in this category, and considering their performance, we were a bit disappointed to not see their devices here.

## FEATURES AND SPECIFICATIONS

These routers were the most expensive in our tests, ranging in price from ₹6,000 to ₹13,500. Interestingly, only the ASUS RT-N66U and SMC SMCWGBR14-N2 had external antennas, the rest going with internal antennas. USB ports were also prevalent, with only the ASUS RT-N53 without one.

Interestingly, the D-Link DIR-827 was the only router in the test with an SD card slot as well as a USB 3.0 port. One thing to note here is that while USB 3.0 might seem to be a good thing on a router, if you are only going to stream data wirelessly, it is on no consequence and there is no point paying extra for it. Wired connections will obviously benefit from the increased throughput of USB 3.0. One shocking item in these tests was the warranty on the SMC router, only 3 months where almost everyone else was providing at least a 3 year.



D-Link DIR-636L

The D-Link DIR-827 also had only a 1 year warranty for whatever reason. Another important point to note is that only the ASUS RT-N53 and N66U had support for DD-WRT, which is a huge bonus for those who want to tinker around with their systems.



ASUS RT-N66U



TP-Link TL-WR841N

## PERFORMANCE

In terms of pure performance the SMC SMCWGBR14-N2 and Belkin N750DB proved themselves quite capable at close range, they however lost out badly when it came to range and signal strength. The ASUS routers, especially the RT-N66U, and the D-Link 636L had the best signal strength in the tests and managed to provide a stable connection upto zone 3.

### Winners

The **Best Buy** award in this category goes to the **D-Link DIR-636L**. The performance was quite good at the price and despite the 300 Mbps cap (compared to the 900 Mbps behemoths), the performance was very good, plus, the unique tubular design might appeal to some!

The **Best Performer** award is only given to one device in the test, so the ASUS RT-N66U had to be left out, but if you want a dual-band router, performance no-bar, this is one to go for. A cheaper alternative would be the SMC-WGBR14-N2, if you don't need the range.

The **Editor's Pick** goes to the **Netgear WNDR3700**. This unassuming router did not feature anywhere prominently in our tests, but is, in fact, second only to the ASUS RT-N66U and quite a good deal at the price. **d**



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**ASRock at Computex 2012**

ASRock introduced three boards for the enthusiasts at Computex this year namely: Z77 OC Formula, X79 Extreme 11 and Z77 Extreme 6/TB4

**Thunderbolt explained**

Tomshardware has this very interesting article telling you about Thunderbolt tech <http://dgit.in/Leohru>

# The Z77 Manifesto

Out in the market to build an Ivy Bridge rig?  
Read on which **Z77** board will give you the best bang for your buck

Nimish Sawant

[nimish.sawant@thinkdigit.com](mailto:nimish.sawant@thinkdigit.com)

Just prior to the launch of the Ivy Bridge processors, Intel had announced the Z77 chipset-based motherboards. The Z77 chipset replaces the Z68 chipset which was launched last year, but the socket remains the same i.e. LGA 1155. This effectively means that all your Sandy Bridge processors will work on the Z77 boards. So the first question that we and most of our readers had was – what is the difference between Z77 and Z68 and does it make sense to upgrade to Z77 chipset if I have just purchased a Z68 board?

While the Z77 board does offer native USB 3.0 support and PCIe 3.0 support, on the whole it is not very different from a Z68 board. So if you have a Z68 board, no need to upgrade; but if you are in the market looking at building a new Ivy Bridge rig, this article is custom-made for you.

## UNDER ₹13,000

This segment had around six boards: two from Gigabyte and one each from ASUS, MSI, ASRock and Foxconn. Yes, Foxconn the manufacturing hub, which is behind the peripherals on most motherboards, have started coming out with their own boards to sell in India. The one we got was the Z77A – S which is the only Z77 board in Foxconn's motherboard lineup. For a basic board, it has features such as a dedicated power/reset button and a POST error LED. But, it was the only board which sported the non-UEFI BIOS, which pales in comparison to the improved UEFI BIOSes seen

on competing boards. It comes with a software utility Fox One to overclock from Windows. Overclocking via the BIOS was not as smooth as we would have liked. The VRM heatsink is absent thereby providing no cooling for the MOSFETS.

Gigabyte had the Z77 G1 Sniper M3 and the Z77X-UD3H boards here. For a gaming board, the Sniper M3 does not have dedicated power/reset buttons or a POST code readout. The main power connector is just a 4-pin one. It does support 2-way GPU setup and it is one of the only boards to sport a Creative CA0132 audio controller. We can overlook the limited number

of SATA ports as you will most likely not be connecting more HDDs. The Gigabyte Z77X-UD3H on the other hand is proper mainstream board with interesting line up of features such as dedicated power/reset buttons, a POST error LED and even voltage check points and also an on-board mSATA connector to which you can attach a separate mSATA SSD for using Intel SSD caching feature. We felt that the VRM heatsink could have been much better. Both the boards sport a new digital PWM controller which provides auto-voltage compensation which delivers steady power flow to both memory

## Thunderbolt from ASUS

ASUS introduced two Thunderbolt based motherboards at Computex namely P8Z77 VPro/Thunderbolt and P8Z77V Premium alongwith a ThunderboltEX add-in card



## PURO Hi-Fi from Biostar

Biostar introduced PURO Hi Fi boards at Computex promising high audio quality at low price points

**Motherboard test**

## HOW WE TESTED

We believe that a motherboard performance is completely a function of its components. The higher specced the components, the better performance you will get. For a same chipset, the variation in scores is not much as will be evident from our scores. The difference is within the margin of error. This can be easily understood by the fact that benchmark scores from a ₹10,000 board are very close to the benchmark scores from a ₹30,000 motherboard, give or take 5 per cent.

So, it ultimately boils down to the feature set you are getting with the motherboard, the build quality, ease of overclocking, and other factors. Keeping this in mind, we decided to not give any weightage to the performance scores. We have run benchmarks, and we have all the scores with us, which we will share. But in our final evaluation, we have not considered these scores as that does not give you an estimation of the motherboard's value.

Our Test Rig comprised the following components:

Processor: Intel Core i7-3770K

SSD: Kingston HyperX 240GB SSD

RAM: 2x4GB Kingston HyperX RAM @ 1333MHz at 9-9-9-24

Cooler: Intel Stock

Graphics Card: AMD HD 6850

Power Supply: Cooler Master SPH 1050W

OS: Windows 7 Ultimate x64

The layout of the board was scored, we checked if there was enough spacing around the CPU region to comfortably attach the CPU cooler and which way the SATA ports were pointing (those pointing up got a lesser score). Spacing between the RAM slots and the graphics card was checked. We also noted the spacing between PCIe and PCI slots.

If a dual slot card blocked the next PCIe slot, marks were deducted. For build quality we noted the sturdiness of the heat sinks around the VRM regions and southbridge. Motherboards lacking a heatsink around the VRM region got lesser score, whereas those having an active cooling mechanism on the Southbridge scored higher. Board with all solid state capacitors got a higher score. Back panel I/O ports were noted and also the option to expand USB ports.

Overclocking is one of the key features with Z77 boards. So features such as utilities, on-board chip additions, were taken into consideration. A board having more options to overclock and tweak got a higher score. Also the BIOS user experience was noted with boards having a more user-friendly BIOS and which ensured lesser navigation getting a higher score.

We did a thorough checking and testing (wherever applicable) of the feature set offered by a motherboard and based on the price have decided on the winners. We decided on the price brackets for comparison in such a way that each bracket had more or less the same number of boards, so as to be fair to all boards.

and CPU irrespective of the load on the hardware. Both boards also sport the 3D BIOS which is an interesting implementation of the UEFI BIOS. Although it looks impressive, the lag while using the mouse is quite noticeable and makes the whole exercise tedious. We liked the 3D Power utility which allows you to monitor and control power, phase and frequency. The EasyTune 6 utility provides overclocking within the Windows environment.

ASUS P8Z77M PRO was another microATX form factor board in this segment along with the Gigabyte Z77 G1 Sniper M3 and the MSI Z77MA-G45. Just like the Sniper M3, the P8Z77 M PRO sports four DIMM slots supporting upto 32 GB of DDR3 RAM. It has a comparatively better heat sink and more SATA ports than the Sniper M3. The M Pro sports the dual intelligent processors i.e the Energy Processing Unit (EPU) and the TurboV Processing Unit

(TPU). Both these processors are controlled by two notches on the board that can activate them. While the EPU helps in energy saving, the TPU enables you to automatically tune the system. This can also be accessed by the utility called TurboV EVO which allows easy one-click overclocking. On the I/O panel you also have the BIOS flashback button which allows you to update BIOS by inserting a FAT 16/32 USB drive with the BIOS and pressing the BIOS

flashback button for around 5 seconds. The UEFI BIOS implementation on this board is quite user friendly as well.

MSI Z77MA-G45 is a microATX form factor board which can be considered as a smaller sibling of the MSI Z77A-G45. It comes with a beautiful layout and although it lacks dedicated power/reset buttons, it has much better VRM heatsinks. It comes with ClickBIOS II which replicates the UEFI BIOS in a Windows





	Under ₹13,000								
Brand	Foxconn	MSI	Gigabyte	ASRock	Gigabyte	ASUS	MSI	MSI	
Model No.	Z77A-S	Z77MA - G45	Z77 G1 Sniper M3	Z77 Extreme4	Z77X-UD3H	P8Z77M-PRO	Z77A-G45	Z77A-G43	
Price (in ₹)	6,600	10,650	11,700	11,999	12,500	12,961	13,090	13,300	
Specifications (Out of 50)	22.5	20.4	25.3	31.2	34.7	25.9	25.3	20.3	
Overclocking and BIOS Options (Out of 25)	6.25	15	8.75	6.25	13.75	17.5	18.75	15	
Board Layout (Out of 20)	9.9	14	13.4	15.7	15.7	14.6	15.7	13.5	
Package Bundle (out of 5)	0.3	0.3	1.85	1.55	1.85	1.85	0.3	0.3	
Grand Total (Out Of 100)	38.95	49.7	49.3	54.7	66	59.85	60.05	49.1	
Features and Specifications									
DIMMs / Max. Memory Supported (GB)	4 / 32	4 / 32	4/32	4/ 32	4 / 32	4 / 32	4 / 32	4 / 32	
No. of SATA 2 / SATA 3 ports	4 / 2	4 / 2	3 / 2	4 / 4	4 / 4	4 / 2	4 / 2	4 / 2	
No. of PCI Express 2.0 x16 / 3.0 x16 graphics slots	1/1	0/2	0/3	0/2	0/3	1/2	1/2	1/1	
No of PCIe x1/x4/x8	2/0/0	2/0/0	1/0/0	2/0/0	3/0/0	1/0/0	4/0/0	2/0/0	
Multi GPU (SLI/CrossFire) Support	N / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	N / Y	
No of LAN Ports	1	1	1	1	1	1	1	1	
On-board Wi-Fi (Y/N)	N	N	N	N	N	N	N	N	
No. of ports - USB 2.0 / USB 3.0	4/2	6/2	4/2	2/4	0/6	2/4	4/2	6/2	
No. of Fan Connectors	3	2	4	6	4	4	5	5	
Clear CMOS Button	N	N	N	Y	Y	N	Y	N	
Power and Reset Buttons (Y/N)	Y	N	N	Y	Y	N	N	N	
USB 2.0 / USB 3.0 header	2/1	2/1	3/1	2/1	3/1	3/1	3/1	2/1	
POST error code LED	Y	N	N	Y	Y	N	N	N	
HDMI/D-Sub/DVI/DisplayPort	1/1/1/0	1/1/1/0	1/1/1/1	1/1/1/0	1/1/1/1	1/1/1/1	1/1/1/0	1/1/1/0	
mSATA Connector	N	N	N	N	Y	N	N	N	
Form Factor	ATX	mATX	mATX	ATX	ATX	mATX	ATX	ATX	
Overclocking (OC) and BIOS Options									
OC button / Utility / Presets	N/Y/N	N/Y/Y	N/Y/N	N/Y/N	N/Y/Y	N/Y/Y	N/Y/Y	N/Y/Y	
Voltage check points	N	N	N	N	N	N	Y	N	
Preset options (Energy saving, Normal, Overclocked)	N	Y	N	N	N	Y	Y	Y	
Board Layout (Out of 20)	9.9	14	13.4	15.7	15.7	14.6	15.7	13.5	
Package Bundle									
No of SATA cables	2	2	4	2	4	4	2	2	
USB 3 / USB 2 Bracket	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	
CrossFire / SLI Bridge	N	N	Y	Y	Y	Y	N	N	
Performance (For reference only)									
Cinebench R11.5 CPU (All cores)	7.44	7.43	6.95	7.45	7.21	7.57	7.46	7.64	
3D Mark 11 (1080p Extreme)	1120	1126	1130	1128	1131	1130	1128	1134	
100 MB file Video Encoding (sec)	17.41	17.51	17.64	18.23	18.41	17.49	17.64	17.9	
USB 3.0 Transfer (in MB/s)									
Sequential Write/Read	58.8/32.6	57.6/32.7	56.4/33.4	58.3/32.3	57.6/32.3	57.4/32.6	57.7/33.1	58.733.4	
Assorted Write / Read	101.7/38.4	102/39.5	100/38.4	102.3/38.3	102/38.5	98/36.7	101.3/39.6	104/42.1	

₹13,001 to ₹17,000						Above ₹17,000					
	Biostar	MSI	ASUS	ASUS	Intel	ASUS	ASUS	Gigabyte	ASUS	MSI	ECS
	TZ77 XE4	Z77A-GD55	P8Z77-V	MAXIMUS V GENE	DZ77GA-70K	P8Z77-V PRO	SABER TOOTH Z77	Z77X-UD5H WiFi	P8Z77-V DELUXE	Z77A-GD80	Z77H2-AX
	13,390	15,400	16,388	16,388	16,500	17,768	19,608	20,700	22,770	22,400	23,920
	28	27.3	32	30.6	32.1	30.1	26.5	38.85	34.9	30.2	29.6
	6.25	21.25	17.5	18.75	15	17.5	17.5	18.75	18.75	21.25	10
	14.5	15.5	15.5	15.7	15.4	16	15.8	15.7	16.3	16	15.7
	1.85	1.85	1.85	2.15	2.55	2.35	1.85	3.15	2.15	2.85	3.15
	50.6	65.9	66.85	67.2	65.05	65.95	61.65	76.45	72.1	70.3	58.45
	4 / 32	4 / 32	4 / 32	4 / 32	4/32	4 / 32	4 / 32	4 / 32	4 / 32	4 / 32	4 / 32
	4 / 4	4 / 2	4 / 4	4/2	4 / 4	4 / 4	4 / 4	4 / 5	4/4	4 / 4	2 / 4
	1/2	1/2	1/2	0/2	0/2	1/2	1/2	0/3	1/2	0/3	0/3
	1/0/0	4/0/0	2/0/0	0/1/0	2/1/0	2/0/0	3/0/0	3/0/0	4/0/0	4/0/0	2/0/0
	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y	Y / Y
	1	1	1	1	2	1	1	2	2	1	1
	N	N	Y	N	Y	Y	N	Y	Y	N	N
	4/2	4/2	2/4	3/4	4/4	2/4	4/4	2/4	4/6	4/2	4/4
	3	5	4	5	4	6	6	5	6	5	3
	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y
	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y
	2/1	3/1	4/1	2/1	3/2	4/2	3/1	2/3	2/1	3/1	1/1
	Y	N	Y	Y	Y	N	N	Y	Y	Y	Y
	1/1/1/1	1/1/1/0	1/1/1/1	1/0/0/1	1/0/0/0	1/1/1/1	1/0/0/1	1/1/1/1	1/0/0/1	1/1/0/0	1/1/0/0
	N	N	N	Y	N	N	N	Y	N	N	N
	ATX	ATX	ATX	mATX	ATX	ATX	ATX	ATX	ATX	ATX	ATX
	N/Y/N	Y/Y/Y	N/Y/Y	N/Y/Y	N/Y/Y	N/Y/Y	N/Y/Y	N/Y/Y	N/Y/Y	Y/Y/Y	N/Y/N
	N	Y	N	Y	N	N	N	Y	N	Y	Y
	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	14.5	15.5	15.5	15.7	15.4	16	15.8	15.7	16.3	16	15.7
	4	4	4	6	2	4	4	6	6	4	6
	0/0	0/0	0/0	0/0	1/0	0/0	0/0	1/0	0/0	1/0	1/0
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	6.23	7.87	7.45	7.95	7.23	7.54	7.45	6.54	7.34	7.51	7.12
	1128	1131	1121	1131	1132	1118	1129	1122	1131	1123	1128
	18.34	17.85	18.02	16.98	18.78	18.65	17.82	17.05	17.45	17.66	19.24
	59.3/34	58.2/32.6	56.4/33.4	57.4/32.4	56.5/34.3	57.2/32.2	56.9/32.6	58.1/33.4	57.4/32.3	57/32.6	58.5/33.2
	103/38.4	102/38.9	101/38.4	98.6/37.1	102/39.3	100.3/39.5	98.4/37.4	102.4/38.1	102.3/36.5	102/39.2	102.1/37.5



## Internet freedom at risk

Google reports show increased number of requests from governments to remove content from the web. <http://digit.in/MqX5aW>

## ICS update for Xperia Active

Sony has started rolling out Android 4.0 ICS update for Sony Xperia Active. When the update arrives on your phone, you will get a notification

environment. Overclocking was quite simple on this board as the UEFI BIOS is quite easy to navigate and has a separate section for adjusting the OC settings.

The ASRock Z77 Extreme4 was one board that looked very impressive. Borrowing from the design aesthetics seen in the Z68 Extreme series of boards, the Extreme4 sports the angular heatsink above the VRM. It comes with the XFast 555 technology feature which provides fast optimized RAM speeds, fast LAN speeds and quicker USB 3.0 speeds. It offers the Dehumidifier function, which was also seen on the Gigabyte boards, which prevents humidity in the air from causing damage to your system. Another feature offered with this board is the Online Management Guard, which allows you to set internet

UD3H scored higher due to the form factor. It emerged as the winner in features and specifications, board layout and package bundle whereas the ASUS board won with the Overclocking options. Keeping the pricing in mind, the Gigabyte Z77X-UD3H won the Best Buy in this category.

## BETWEEN ₹13,001 TO ₹17,000

With the Intel DZ77GA-70K reference Z77 board, we were expecting a non-UEFI BIOS, but not only did it prove us wrong on that front, it also left us thoroughly impressed. There is a homepage which has three main tabs namely Processor, Graphics and Memory which allow you to tweak options within them. Instead of the top to down approach, Intel has gone with the tabbed approach in all the options under the Advanced Menu options. Overclocking from the BIOS is child's play. The DZ77GA-70K also comes with a load of accessories such as a mouse pad, a WiFi module which goes in one of the PCI x1 slot, a WiFi antenna,

plier, voltages among others. If you place a large CPU cooler, the graphics card on the first PCIe slot and the memory module on the first DIMM slot get affected. Just like ASUS it also comes with a BIOS flash option, allowing you to update the BIOS with just a USB drive.

MSI had three boards namely Z77A-G45, Z77A-G43 and Z77A-GD65. All three boards have minor differences with the G45 and GD55 being almost similar in the feature set offered. The G43 offers two extra USB 2.0 ports and three PCI slots (which are absent on the other two boards). The G43 has lesser PCIe x16 slots as compared to the other two boards. Visually the only thing that you can tell apart among the three boards is the VRM heatsink quality, which is the best with the GD55. All three boards feature the UEFI BIOS which is very easy to navigate and has a dedicated section for overclocking. This same UEFI BIOS can be replicated in the OS with ClickBIOS II. The arrangement of SATA

ports on the G43 is not ideal as all the SATA ports point upwards. Wire management can get tricky if you have a long graphics card in the second PCIe slot. GD55 and G45 come with voltage check points whereas only



ASUS Maximus V Gene

the GD55 has the onboard OC Genie II button.

ASUS had the mainstream P8Z77-V and the gamers board Maximus V Gene. The Maximus V Gene is one the best looking boards in this test with a neat red and black colour theme. It comes with all the bells and whistles associated with a board belonging to the Republic Of Gamers' series including ROG connect, Supreme FXIII, Extreme Engine Digi+II among others. The layout is quite dense with extremely sturdy heat-sinks on both the VRM and the southbridge, which even lights up once you power the system. The Supreme FXIII chip and its surrounding circuitry is separated from the rest of the board with the help of line which illuminates on powering the system. It helps to keep the dedicated sound segment free from noise produced by the rest of the



Gigabyte Z77X-UD3H

access restrictions. The UEFI BIOS on the ASRock boards is not as attractive as the ones seen on ASUS or MSI boards, but its quite functional and allows for easy overclocking. We managed to overclock the processor to around 4.4GHz on air thereby increasing the Cinebench R11.5 score by over 20 per cent.

## Winner

It was a close fight between Gigabyte Z77X-UD3H and ASUS P8Z77M PRO, but the

an external USB 3.0 bracket. The TZ77XE4 is the flagship board from Biostar, but when compared with competition's flagship boards it's found to be lacking in certain aspects. It has a very decent feature set mind you, but the BIOS implementation could have been much better. BIOS overclocking options are not that exhaustive. It comes with a dedicated overclocking utility called Toverclocker which is quite handy allowing you to tweak multi-



Gigabyte Z77X-UD5H WiFi





## Microsoft revamps Hotmail

Software giant Microsoft has just revamped its email service Hotmail to which has Metro interface design

## Hidden dangers of Facebook

Being a Facebook addict or posting unnecessary information would be critically dangerous.

<http://digit.in/LVwsfI>

**Motherboard test**

board. It provides a mini PCIe header beside the ROG Connect button on which you can attach the mPCIe combo card which can house either an mSATA SSD or a WiFi card.

The other ASUS board is your mainstream P8Z77-V whose main feature is the on-board WiFi connectivity. It offers WiFi adapter which allows you to set up a WiFi hotspot, control your system with a smartphone or tablet, do DLNA streaming as well as file transfers between your PC and smartphone/tablet. Fan Xpert 2 is another good utility which allows you to control each of the fans connected to your board. Overclocking on both the ASUS boards is quite easy from the UEFI BIOS, which also has a shortcut key-F3, to pull up the most used controls and tweak them. The Ai Suite II is a wonderful utility to overclock ASUS boards from the OS environment. We easily went over 4.4GHz on both the boards on air, giving a 20 per cent boost in CineBench R11.5.

### Winner

This category had a close fight between the last four boards, but ASUS Maximus V Gene emerged as the overall Best Buy thanks to its supreme score in three out of the four main aspects of the testing. MSI Z77A-GD55 was another very good board we found in this segment with a cheaper price than the Maximus V Gene, but the feature packed Gene board edged past it.

### OVER ₹17,000

This segment had six boards featuring three from ASUS and one each from Gigabyte, ECS and MSI. Starting with the most expensive of the lot – the gold and black coloured ECS Z77H2-

AX. It has 15 micron gold contact on the CPU socket, PCIe slots and memory slots which assist in conduction of current. Has onboard WiFi and Bluetooth and extra PLX chip for more PCIe lanes. The BIOS despite being a UEFI one, does not assist one much when it comes to overclocking, specially when one compares it with BIOSes from ASUS, MSI or Gigabyte. Also the overclocking utility bundled wasn't as great as the ones offered by competing vendors. The eOC utility does not have multiplier option. There is a lot of scope for improvement on this front. It has a great build quality on the VRM heatsink and the southbridge heatsink has a temperature sensitive sticker. Placement of SATA ports is good.

ASUS had three boards namely the P8Z77V PRO, P8Z77 V DELUXE and Sabertooth Z77. The board that is interesting is the Sabertooth Z77 which comes covered with the Thermal Armour. It helps to direct the hot air away from the motherboard and its components. You can add in the extra fans provided which draw in cold air and drive away the hot air. Convection holes under the motherboard further help in dissipating heat. The Thermal Radar utility helps you monitor temperatures at multiple points on the board which are fitted with sensors. It does not have dedicated power/reset buttons, voltage check points, on-board WiFi, etc. Both the P8Z77 V Pro and P8Z77 V Deluxe sport on-board WiFi along with the EPU and TPU goodness. The ASUS boards have the most user-friendly UEFI BIOSes making overclocking a piece of cake. We easily overclocked to 4.5GHz on all ASUS boards over air. Ai Suite II is an all-in-one utility to monitor your temper-

atures, voltages and power. You can also over-clock from the utility itself.

Gigabyte Z77X-UD5H is the flagship board from Gigabyte's Z77 lineup barring the G1 Sniper series of gaming boards. So UD5H is packed to the gills with an exhaustive feature set including dedicated power/reset buttons, POST error code LED, sturdy heat-sinks, on-board voltage check points, on-board mSATA port, on-board WiFi among other things. The heat sinks are joined by a heat pipe which assists in dissipating heat. It comes with the 3D Power digital engine along with the 3D Power Utility to monitor and tweak voltage, phase and frequency. Overclocking using the BIOS is quite easy but you would be much better off not using them mouse as the Gigabyte BIOS responds very slowly to mouse movements or commands. The UD5H is one well rounded board.

The MSI Z77A-GD80 was the only board featuring the Intel Thunderbolt port amongst all the boards tested. MSI is one of the first in that aspect making the board future proof. The Thunderbolt cable is capable of reaching theoretical speeds of upto 10 Gbps and can deliver data from the PCI express and display port. PCIe as well as display port signals enter the Thunderbolt cable separately. The entry point Thunderbolt controller (which is present on either end of the cable) multiplexes these signals and passes them through the cable, which



MSI Z77A-GD80

is then demultiplexed by the exit point Thunderbolt controller. Apart from the Thunderbolt goodness, the GD80 features all the military grade components, has all the other features such present on the GD55 and better heatsinks. It has an onboard OC Genie button as well as voltage check points. All in all a sturdy future proof board.

### Winner

Although we had some very interesting boards in this segment such as the ASUS Sabertooth Z77, MSI Z77A-GD80 and Gigabyte Z77X-UD5H, selecting the best value for money board was a difficult task. However, keeping in mind the scores across the four testing sections, and the price, we had a clear winner in Gigabyte Z77X-UD5H. Having said that, the ASUS Sabertooth Z77 is also a good board, but loses out on some crucial features. MSI Z77A-GD80 was awarded the Editor's Pick as it had most of the features present on the UD5H and Sabertooth Z77, but it had one forward looking feature in the form of Thunderbolt port. You will have to invest money in a thunderbolt cable though. Price proposition was better than ASUS P8Z77 V Deluxe. **d**



### Disappearing keys

Tactus is working on a touch-screen, android tablet that can provide true tactile feedback. <http://dgit.in/Kcm45U>

### Nokia Maps go social

The new update from Nokia seems similar to Google Maps on social location, just like travelers can now add reviews and photos to locations. <http://dgit.in/Kx3q80>

# Spend Smart!

Most people spend less than ₹10,000 on their very first smartphone, and we're here to decide exactly what model that should be...



Sameer Mitha

[sameer.mitha@thinkdigit.com](mailto:sameer.mitha@thinkdigit.com)

In this app crazy world of ours, you don't own a phone unless you can tell what OS it's running. Android so-and-so for the masses, iOS something-or-the-other for the rich spoilt brats, bada for the ones who want to stand apart, Windows for many others... you get the drift. No one wants a dumb phone anymore, but not all of us are blessed with pockets deep enough to be able to spend any

more than ₹10K on a phone, and, guess what, you don't need to. Thanks to the opening up of the Indian phone market, all of us have a plethora of choices, and most of them are pretty good at what they do.

Obviously, in order to keep prices below ₹10,000, these devices need to compromise on a few features – but can you really blame them? Yes, you will not get cutting edge touch-screen quality, or an amazing camera, but what you will get is a feature-rich smart phone for a fraction of the price.

We received 8 devices. Three of these devices run on Google's popular Android OS, one on Samsung's bada OS, and three on Nokia's Symbian S40.

### BATTLE OF THE OS: ANDROID VS BADA VS SYMBIAN

The sub ₹10,000 price point has spoiled the consumers in terms of the OS available. You have budget phones running Android, Symbian as well as proprietary OSes such as bada. The Android OS is essentially a smartphone OS giving users

access to a plethora of apps and functions. Customisation is the biggest feature of Android as it gives you access to widgets that you can use to populate your home screens. The Android devices usually have a skin to make the interface look different from the competition. If you don't like the pre-loaded skin, you can replace it by downloading one from the Google Play store. The Symbian S40 OS is ideal as a feature phone OS, but lacks the apps library that Android offers. The Bada OS has Samsung's



## Men made the internet...

Said the first line of a NYT article. Naturally there was a feminist backlash. To find out more, head over to <http://digit.in/MkkNUw>

## The Superman experience

Google Earth goes 3D. Now you can move around, rotate and interact with 3D images of the cities, at the touch of your phone. <http://digit.in/KPnfGA>

## Budget smartphones

App store and its appearance is quite similar to other Samsung phones, thanks to the TouchWiz skin, but it is by far the weakest OS in this shootout.

### ANDROID

The overall experience of the Samsung Galaxy Y Pro Duos feels lackluster considering that Gingerbread wasn't designed to run on such a small screen (2.6-inches) with a physical QWERTY keypad. But all isn't bad. The device ran all the apps we threw at it with absolute ease but lagged during multitasking which is expected since the device runs on an 832MHz processor.

The Spice MI 350N too suffers from multitasking issues. Because of the 650MHz processor, you will be killing tasks faster than flies and face a lagging multitasking performance. The best part of the device is that it comes packed with quite a few preloaded apps such as the Delhi Metro app, a bunch of news apps, just dial, ibibo, SpiceGang and a few games. The 2.8-inch Samsung Galaxy Pocket can be easily described as an entry-level Android packet. It's got an 832 MHz processor, which gets the job done in terms of running apps. It was also one of the best performers in terms of the benchmarks. Its like they say, some of the best things come in small packages.

In terms of its features, the Micromax A50 Ninja is just like all the other Android phones on this list. Where it outshines the others is with the preloaded voice assistant called Aisha. There are a few reasons why Aisha is a treat to work with. For starters, she understands the Indian accent better than Siri and is more apt for the India user. Secondly and most importantly,

### HOW WE TESTED

For budget smart phones there are a few essentials that need to be looked at. For starters, the devices need to function as a phone and take care of the basics – making calls and text messaging. For this, we tested the phones in 3 conditions – full signal strength, half signal strength and minimum signal strength – to judge the performance of the call quality. We also considered the quality of audio at both while speaking as well as listening. The quality of the loudspeaker was looked at as well. Some of these devices are dual SIM where as the others support single SIM.

As far as texting goes, some devices were touch-screen, others showed off a QWERTY keypad. We tested the ease of typing, response and flexibility of each. Ease, comfort, error during typing and the comfort for prolonged typing were tested.

Since these devices boast of the ability of being

smart, they needs to be able to do a lot more than the basics. We ran benchmarks on the devices to see the performance of the raw power under the hood. Since the OSes are diverse, the average of the benchmarks were used to compensate for the devices that didn't support certain benchmarks. We also ran multimedia on the device – songs, YouTube videos and played some games to see how they performer.

Music is something we all keep on our smartphones and we tested the device by playing some Nickelback and judging the output of the smartphones speakers as well as the bundled headphones. We also judged the devices on the basis of their overall build quality, the display size, resolution, colour representation and depth. Since these are budget phones, we didn't expect stellar performance from the cameras but we tested their output nonetheless.



Spice MI-350n

if you have a quirky conversation with her about your love life or death, the answers you receive go beyond hilarious! When we turned on the Aisha app for the first time, it asked for an update. We recommend that you too update the device so that the app works effectively. The app identified locations, searched the web and also claimed that the iPhone is the best phone in the world. An affair brewing between Aisha and Siri?

### SYMBIAN S40

The Nokia 303 is a Symbian device, which means that its app ecosystem isn't the best but there are a few things to look out for. The device comes preloaded with apps such as Angry Birds, FIFA, NFS, news apps, maps and access to the Nokia Ovi store. The best part is that the device ran all these apps very well.

The Nokia Asha 302 and Asha 200 are Nokia's entry-level devices. They may not be as app-friendly as the Asha 303, but you can expect to do the basics such as social networking, a bit of web browsing and access apps from the Nokia Ovi store nonetheless – just don't expect a stellar experience. One of the best features of the Symbian OS is that it isn't as intimidating as Android is to new comers. Anyone who has ever used a Nokia phone will feel right at home. The OS also offers you the ability to customise the home screen, which allows you to launch all of your most frequently used apps straight from the home

screen. The customisation may not be as elaborate as Android – which offers you widgets and multiple home screens – but it is very useful nonetheless.

### BADA

If rumours are to be believed, Samsung might stop developing bada further, in order to focus on Tizen. If this is true, then you may not find any more bada devices soon, so keep your eyes peeled. The



Micromax A50



Brand	Samsung	Spice	Samsung	Micromax	Nokia	Nokia	Nokia	Samsung
<b>Model</b>	Galaxy Y Pro Duos	MI-350N	Galaxy Pocket	Superphone Ninja A50	Asha 303	Asha 200	Asha 302	Wave Y
<b>MRP/ Box Price (₹)</b>	9,500	7,710	6,990	4,990	7,765	4,070	6,285	7,140
<b>Features (out of 30)</b>	12.29	13.81	12.40	11.76	11.03	7.93	10.82	11.06
<b>Performance (out of 40)</b>	15.22	14.30	14.76	14.36	14.94	14.78	14.86	13.50
<b>Design (out of 30)</b>	19.20	20.40	18.30	17.70	16.80	15.60	18.30	18.15
<b>Grand total (out of 100)</b>	46.71	48.51	45.46	43.82	42.77	38.30	43.98	42.71
<b>Physical Specs</b>								
2G/3G Networks	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/N	Y/Y	Y/Y
Dual SIM (Y/N)	Y	Y	N	Y	N	Y	N	N
Display Resolution (pixels)	320 x 240	320x480	240 x 320	240 x 320	320 x 240	320 x 240	320 x 240	320x480
Display Size (inches)	2.6	3.5	2.8	3.1	2.6	2.4	2.4	3.2
Battery Rating (mAh)	1350	1500	1200	1200	1300	1430	1320	1200
Weight (in grams)	112.3	134	97	110	99	105	106	102.4
Expandable Memory Type	microSD	microSD	microSD	microSD	microSD	microSD	microSD	microSD
RAM (in MB)	384	206	296	256	128	32	128	NA
CPU Clock speed (in MHz/ GHz)	832 MHz	650 MHz	832 MHz	650 MHz	1 GHz	NA	1 GHz	832 MHz
OS/ Hardware/ Battery Features								
Operating System (Tested with)	Android 2.3	Android 2.3	Android 2.3	Android 2.3	S40 Asha	S40 Asha	S40 Asha	bada 2
Hardware Keypad (Regular/ QWERTY)	Y	N	N	N	Y	Y	Y	N
Accelerometer (For auto rotate)	Y	Y	Y	Y	N	N	N	Y
GPS (Y/N)	Y	Y	Y	Y	N	N	N	Y
<b>Connectivity Specs</b>								
Browsing (GPRS/EDGE/3G)	Y / Y / Y	Y / Y / Y	Y / Y / Y	Y / Y / Y	Y / Y / Y	Y/Y/N	Y / Y / Y	Y / Y / Y
3G max speed (in mbps)	7.2	7.2	3.6	7.2	10.2	NA	14.4	7.2
Connectivity (WiFi/Bluetooth/USB)	Y / Y / Y	Y / Y / Y	Y / Y / Y	Y / Y / Y	Y / Y / Y	N/Y/Y	Y / Y / Y	Y / Y / Y
<b>Camera Specs/ Features</b>								
Camera Specs (Mega Pixels)	3.15	3.15	2	2	3.2	2	3.15	2
Video Resolution	QVGA	VGA	QVGA	VGA	VGA	VGA	VGA	HVGA
Secondary camera for video chat	Y	Y	N	N	N	N	N	N
<b>Build and Ergonomics (Out of 10)</b>								
Build Quality	5	6	6	6	6	5	6	6
Keyboard	8	8	7	7	4	8	7	6
Font	5	5	5	4	7	6	6.5	7
<b>Signal Reception and Voice Clarity Tests (Out of 10)</b>								
Zone 1	8	8	8.5	7	8.5	8.5	8.5	7
Zone 2	8	6.5	8	6.5	8	8	8	6
Zone 3	8	6.5	8	6.5	8	8	8	6
<b>Display Rating (Out of 10)</b>								
Crispness	6	6.5	5	6	8	5	7.5	8
Colour	5	5	5	4	7	6	6.5	7
Contrast	6	6.5	5	6	7	4	5	7.5
Video playback	7.5	4.5	5.5	6	4	4	4	6
<b>Benchmarks</b>								
Quadrant	1017	801	885	954	914	914	914	914
AnTuTu	1599	1704	1878	2344	1881	1881	1881	1881
LinPack (single thread)	9.6	8.46	7.73	7.64	8.35	8.35	8.35	8.35
LinPack (multi thread)	8.55	7.01	7.98	7.26	7.7	7.7	7.7	7.7
GL Benchmark - Egypt Standard (in frames)	2880	3057	2801	3871	3152	3152	3152	3152
Peacekeeper web browser test	80	68	79	72	74	74	74	74
Rightware Browsermark	19640	17068	20377	18272	16482	16482	16482	7055
SmartBench 2012	344	304	348	310	326	326	326	326
NenaMark2 (FPS)	13.1	23.9	12.1	28.3	19	19	19	19

FCC chairman Julius Genachowski wants to revamp testing procedures of mobile emission which were set back in 1996. <http://dg.it.in/MfVsgB>



In discussion with 'facebook for the workplace' company Yammer Inc. to seal the deal worth \$1.2 billion. <http://dg.it/KK51Uy>

## Samsung Wave Y



# Nokia Asha 302

TouchWiz skin may make the device look like an Android device, but the app ecosystem is still lacking. You do get access to Samsung apps, and bada is a pretty good OS, but with the uncertainty associated with the platform, we can't really recommend this device. Stick to the Galaxy Pocket if Samsung is your brand of choice.

One of the biggest advantages of these devices is that they have the ability to accommodate 2 SIM cards. The Galaxy Y Pro Duos, Spice MI 350N, Micromax A50 Ninja and the Nokia Asha 200 are the only ones in this test to support dual SIMs. The Nokia Asha 200 has a slight edge here as you can



## Samsung Galaxy Pocket

type are: Samsung Galaxy Y Pro Duos and the Nokia Asha 303. This makes it easy to play touch-

screen games and navigate the OS with ease as well as have a great physical QWERTY typing experience. The rest of the devices have a capacitive touchscreen. All the devices support rear facing cameras but these are more of added features rather than utility. The megapixel count on these devices ranges from 2MP to 3.2MP and the output depends largely on the ambient lighting. If the surroundings are bright enough, the pictures are acceptable and clear. The lowlight performance of the cameras on all the devices was underwhelming and noisy.

The biggest drawback of all the Android devices on this list is that they aren't the best at multitasking. This is due to the low clock speeds of the processor on the device. The biggest surprise here is that the Nokia Asha 302 and 303 have a 1GHz processor that is the best amongst all the devices. This ensured the smoothest and most seamless performance on the device when compared to the rest.

Comparing the typing experience on the devices, out of the devices that offer the physical QWERTY keypad, the Samsung galaxy Y Pro Duos along with the Asha 200 and the Asha 302 are better than the Asha 303. The



## Samsung Galaxy Y Pro Duos

back lighting on the keypad is better and secondly, it's an overall more comfortable experience due to the shape

[illegible]



## Apple sued for \$25,000

British Columbia man sues Apple as his 3 year old backup at Time Capsule just vanished after the device died. <http://dgit.in/KGJSKK>



## Skype illegal in Ethiopia

Use of VoIP services is considered to be a criminal act in Ethiopia and could land you in jail for 15 years. <http://dgit.in/MxWQg5>

of the keys and the spacing. The spacing on the Asha 303 feels very cramped.

In terms of the touch-screen-only-device, one device that really surprised us was the Samsung Galaxy Pocket. Despite being a device with a 2.8-inch display, the onscreen typing experience was surprisingly good. Better than the HTC Explorer. The Spice MI350N and the Micromax A50 gave us an average typing experience.

The only feature that remained unanimous on all the devices was the call quality. The devices have 50% signal

online experience. In terms of connectivity, all the Android powered devices have micro USB that can be used as the charging port for the device as well for data transfer. The same is the case with the Samsung Galaxy Wave Y. The Nokia devices however maintain the thin pin charging port and have a micro USB port for data transfer. All the devices support Wi-Fi as well except the Nokia Asha 200 that compromises on this feature to maintain its price point. The Asha 200 also compromises on 3G connectivity but users can access their social networking accounts and the Internet via GPRS/EDGE.

We also saw a bunch of .3gp videos on the devices. The representation of colour, viewing angles and audio output was measured. Surprisingly the smoothest performance was on the small screen of the Samsung Galaxy Y Pro Duos. It was smooth and the audio was considerably loud. The Asha 303 has a great screen with nice contrast ratios and deep blacks. The Micromax A50 and the Asha 302 and Asha 200 were a bit disappointing in their video playback. We were hoping that the spice would perform well since it has the largest screen at 3.5-inches but the colours looked off and the viewing angles weren't great. The performance of the Wave Y was the same as the Y Pro Duos.



Nokia Asha 200

## Winners BEST PERFORMER: NOKIA ASHA 303

The Asha 303 is a complete package. It has a touchscreen as well as a QWERTY keypad. The 1GHz processor is great and can run any apps users decide to throw at it. Did we mention there's a version of Angry Birds available for the device? The device has the ability to take on an entry level Android phone head on. It comes with a bunch of nifty apps such as Book My Show, ebay, unit converter, sports news, maps, social Whatsapp and a large library of games such as Worms, NFS, Fifa and more. There is also access to the Nokia Ovi store that gives users access to a plethora of apps. The library of apps may not be as large as the Google Play store but it gets the job done nonetheless. The

only drawback we find with the device is the lack of multitasking and the keyboard feels a little cramped especially if you have big hands. Did we mention the battery would last you for 2 days of average use?

## BEST VALUE: NOKIA ASHA 200

The Nokia Asha 200 is ideal for someone looking for a phone that offers features and access to apps but isn't looking for the full-blown smartphone experience. It is also the cheapest phone on our list. The overall experience of the email app, music player and social networking are way better than what the competition has to offer especially considering the price at which the device is available. If you are looking for your first foray into apps and social networking on the go without dropping a lot of cash, then this device is definitely for you.

## EDITORS PICK: SAMSUNG GALAXY POCKET

We liked the Samsung Galaxy Pocket for quite a few reasons. For starts it offers a very good Android experience considering its size. You have complete access to the Google Play store along with Samsung apps. Another feature that took us by surprise is the keyboard of the device. It isn't as cramped as the HTC Explorer and is surprisingly comfortable to type on. In terms of the benchmark performances, the device was second only to the Micromax A50 but takes the cake thanks to its better display preloaded apps and faster processor. You should consider the Pocket if you want a taste of the Android ecosystem and done mind compromising on the power under the hood especially the processor that clocks in at 832 MHz.



Nokia Asha 303

strength in places where smart-phones have faced call drops. The outstanding devices here were the Nokia phones. The call quality was excellent. The Spice MI 350N had a very good loud speaker for calls.

All the devices except the Asha 200 support 3G. The maximum speeds of the device vary between 3.6MBPS to 14.4MBPS but the important thing is that budget smart-phones are offering 3G capabilities to give users a seamless

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- GOA 8806141001
- JHARKHAND 9830301971
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- UTTAR PRADESH 9919156492

- BIHAR 9830301971
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- CHATTISGARH 8806141001
- HARYANA 9953796100
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- PUNJAB 9815655334
- WEST BENGAL 9830301971

- CHANDIGARH 9815655334
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- MADHYA PRADESH 9601849189
- RAJASTHAN 9982166929



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## Cache the maps

Google has finally made an announcement that will save you a lot of money. You can now cache portions of Google Maps to view it offline <http://dgit.in/KxCYMj>



## Brazos 2.0 unveiled

AMD announced Brazos 2.0, the successor to its Brazos platform, with two dual-core models - E2 1800 @ 1.7GHz and E1 1200 @ 1.2GHz

# Lava Xolo X900

## Intel enters the mobile phone space



### Specifications

**Platform:** Android 2.3.7;  
**Processor:** Intel Saltwell 1.6GHz single core CPU with Hyper-Threading, and the PowerVR SGX540 GPU (400MHz) 1GB of 32-bit dual channel LPDDR2 memory, Intel Atom Z2460 SoC;  
**Display:** 4.03-inch TFT LCD (1024 x 600 pixels); **Storage:** 16GB internal; **Camera:** 8MP with 1080p HD video

### Contact

**LAVA International Ltd**  
**Phone:** 180030100104  
**Email:** [care@xolo.in](mailto:care@xolo.in)  
**Price:** ₹23,000

6.0/10

Features ..... 7.0  
Performance ..... 7.0  
Build Quality ..... 6.0  
Value for Money ..... 6.5

The Xolo X900 looks and feels very classy. There are still some rough edges, but by and large, it feels well put together. The 4.03-inch display has a very thin bezel on the vertical edges. On the left spine is the micro HDMI port. On the right side is the volume rocker, micro SIM card slot that is essentially a slide out tray and a physical camera key. Clearly, the design is a salute to the iPhone 4 / iPhone 4S, with the front looking something like the Optimus series of smartphones from LG. The phone's battery is not accessible and yet it's not unibody.

Let's get to what you're reading this review for - the Intel Atom Z2460 SoC (codenamed Penwell) that includes a 1.6GHz single core CPU (codenamed Saltwell) with Hyper-Threading, and the PowerVR SGX540 GPU clocked at 400MHz, and 1GB of 32-bit dual channel LPDDR2 memory. The entire platform is codenamed Medfield.

In terms of performance, we were quite impressed with the overall smoothness of the OS, slick opening of apps and no real strain because of the background processes. In a real life usage scenario, the Xolo doesn't feel much inferior to the more powerful HTC One X, and is definitely on par with the likes of the Sony Xperia S! In our benchmark comparison, the HTC One X is obviously the winner. But, the Xolo does go neck and neck with the Sony Xperia S.

Graphics specs, on paper, are impressive. However, we weren't surprised to see the HTC One X finishing way ahead of the Xolo in the benchmark tests, but even the Xperia S nudged it into last place. The supposed advantage on the spec sheet doesn't really translate into actual gaming performance on the Xolo.

The humble 4.03-inch TFT LCD display with Gorilla Glass has a resolution of 1024 x 600 pixels, but what really impressed us was the combination of text crispness and adequate colour punch. Limited colour vividness is very clear when you are watching a video on the device. But, we were impressed by how smoothly it handles fast moving scenes in videos. The only things going against it is its reflective nature, and it doesn't have the brightness punch matching some rivals.

Disappointing bits now. The first being, this comes with Android 2.3.7. We expected ICS out of the box on this one, considering it is a very important phone for Lava as well as Intel. Lava has confirmed that there will be an update for the Xolo in the near future, but we will

believe it when we see it. Second, the built-in speakers are a huge disappointment. They are sufficient if you are soundproofed from the rest of the world, but just do not work for the multimedia bit.

The 8MP camera, at least on the spec sheet, should have been excellent. And it sort of is, for the most part. Images do have a decent amount of depth and considerable crispness when taking shots in good light. Some noise does creep in for low light and indoor shots. Video quality isn't very good, with a distinct lack of crispness and a certain amount of instability.

It is difficult to get through the day on a single charge, with this Xolo under a usage scenario that you usually deploy on your primary phone.

The Lava Xolo has a box price of Rs 25999, and is retailing in the market for around Rs 23000. What we have seen with this Intel powered smartphone is a glimpse of the future. The Z2460 stands up well against the likes of the ARM Cortex A9, but the real kicker will come towards the end of this year when the Z2580 with the dual core SGX544MP2 graphics arrives on smartphones. The Xolo, with the Intel Saltwell processor, is scoring better than the likes of the Samsung Galaxy SII and the HTC Sensation, and is running very close to the newer Sony Xperia S. What Intel needs to solve the battery issue, and get the graphics performance up to competitive level. A very solid start for Intel, but what we are really waiting for is a real "I want this" device.

*Visbal Matbur*



## iPhone 5

According to Apple Insider the iPhone 5 will have a 4.08-inch screen, resolution of 1136 x 640 and 500-nit brightness <http://dgit.in/LB8MM6>



## 96GB memory module!?

GSkill showcased a whopping 96GB RAM module at Computex divided into 12 modules with a 1600MHz max speed with DRAM timings of 11-11-11-28 at 1.5V

Bazaar

# Samsung Galaxy SIII

## A pricey winner from Sammy

People have criticized Samsung quite a bit and called the Galaxy SIII plasticky. We don't think so! The 4.8-inch display is flanked with a very thin bezel, which helps keep the form factor within control. The fake aluminum frame around the phone isn't appreciated though. The Galaxy SIII and the One X have the polycarbonate finish, but the SIII's enamel finish has a bit more shine to it. In turn, that makes fingerprints quite visible, and will be prone to scratches.

Critical to mention that we do not agree with the so-called plasticky build quality criticisms the SIII has faced all along. If that is the case, maybe the HTC One X should have received the same amount of criticism for being "plasticky".

Slide down the notification bar, and you find a set of quick toggles, which can be swiped left and right within the dropdown. Very smooth UI experience, with no jitters or slowdowns.

Pop-up Play feature lets you multitask while playing back a video on the phone, that gets shifted to a free to place smaller window. No visible slowdown in performance.

For the India specific demographic, Siri on the iPhone doesn't really work. Same issue plagues Samsung response to Siri - the S-Voice. And S-Voice definitely doesn't have Siri's humour and wittiness!

Smart Stay, on the other hand, isn't revolutionary, but works well. When enabled, the front facing camera will track your eyes (in reality, it is the face as a whole) and keep the display on, irrespective of the time-out

setting. During testing, the display stayed on as long as we were looking at it, but did dim after a while of no user input.

This is a monster, and there really is no simpler way of putting it. The SIII blitzed the closest rival, the HTC One X, out of the water as if it was a couple of generations old hardware wise! In every single benchmark test, the Galaxy SIII had quite a lead over the One X. Even we were surprised at the level of advantage the SIII had and quite frankly.

The 4.8-inch Super AMOLED is possibly one of the best we have seen on a smartphone. Enough has been said about the Pentile issue, but we have to say that Samsung has done a brilliant job with the final result - and surely the end consumer isn't bothered about the innards as long as the performance isn't sacrificed. Compared head on with the One X's Super IPS LCD2, there is literally no competition as far as colour vividness is concerned. Absolutely no gradation across all the test images we saw on this display. But the real impressive ingredient is the absolute crispness the text gets treated to. The biggest example of that is viewing a web page on the browser, without zooming in at first. You can still read the text, more so because there is no edge noise running a ring around every individual alphabet. Excellent brightness levels throughout, but that is at par with the One X, on the same brightness settings. In automatic brightness mode is a bit darker though. However, where the One X's display has an advantage is with viewing



angles and visibility in bright sunlight. For media playback, very satisfactory black levels, and even fast moving scenes are quite smooth.

Irrespective of the lighting conditions, the excellent 8MP camera that takes very good shots. That does say a lot about the quality of the sensor on the SIII, which keeps it at par with the HTC One X, image for image. Samsung has sent the SIII along with the HDR mode, and the difference with it on and off is clearly visible. Smooth videos as well, and overall, this camera now makes it a trio in a unique league - iPhone 4S, One X and the SIII.

Impressive battery life from the 2100mAh battery, and honestly, better than what we expected from this quad core phone. This one should last a day easily, even with medium-heavy use, and a bit more if you don't stress it a lot.

Visbal Mathur

## Specifications

**Platform:** Android 4.0.4;  
**Processor:** Exynos 4212 Quad Core processor 1.4GHz; **RAM:** 1GB; **Display:** 4.8-inch Super AMOLED, 1280x 720 pixels, Gorilla Glass 2; **Storage:** 16GB, with microSD slot up to 64GB, plus Dropbox free storage of 50GB for 2 years; **Camera:** 8MP with 1080p HD videos; **Battery:** 2100mah

## Contact

**Samsung India**  
**Website:** [www.samsung.com](http://www.samsung.com)  
**Phone:** (city code) 30308282  
**Price:** ₹42,500

8.5/10

Features .....	8.5
Performance.....	8.5
Build Quality .....	7.0
Value for Money .....	5.5



**MacBook Pro updated!**

MacBook Pros now with better graphics and displays. MacBook Airs to have Intel Ivy Bridge chips. <http://dgit.in/LvhE7k>

**World's thinnest Ultrabook**

PC manufacturer Acer revealed its razor-thin, Aspire S5 Ultrabook, which is slated to be the world's thinnest Ultrabook <http://dgit.in/LOkPXL>

# Nikon D4

## Nikon's latest full-frame beast

**Specifications**

**Sensor:** 16.2MP CMOS;  
**Image Processor:** EXPEED  
 3; **ISO Range:** 100 - 12800;  
**Burst mode:** 10 fps; **Max**  
**Video Resolution:** 1920x1080  
 (30,25,24 fps)

**Contact**

**Nikon India Private Limited**  
**Phone:** 0124-4688500  
**Email:** [nindsales@nikon.co.in](mailto:nindsales@nikon.co.in)  
**Tech Support:**  
 0124 4688500 (North)  
 080 42450500 (South)  
 033 40218500 (East)  
 022 40925555 (West)  
**Price:** ₹3,24,995

6.0  
/ 10

Features ..... 7.0  
 Performance ..... 7.0  
 Build Quality ..... 6.0  
 Value for Money ..... 6.5

It's big, it's fast, and if you fling it at someone's face, chances are they'd break a bone or two while the camera would show sign of damage. Yes, we are talking about the Nikon D4, the new beast that takes the stage after the D3 and the D3s have had their fair share of the lime light. The camera packs in quite a bit of new tech along with a 16 megapixel full-frame sensor, a redesigned 51-point focus system and a burst mode of 10 fps.

The Nikon D4 is built of solid magnesium alloy along with an extensive network of weather seals, making this beast an ideal buy for photographers who are constantly roughing it out (wildlife, sports etc). One thing to keep in mind though is that the "weather seal" is only complete when a weather sealed lens is attached to the camera, as these have a rubber gasket at the

lens mounting end which seals the gap between the lens and the mount, so as to prevent any water or dust from accidentally slipping in and ruining the sensor.

Along with the host of buttons that riddle the left and underside of the 3.2" LCD screen, there is also a multi-directional joystick that can be assigned to do a slew of things, but we chose to have it control out focus points. A similar stick can be found on the grip, to ease shooting in portrait mode.

In our use of the Nikon D4, we found that most of the settings require two-hand-one-eye use. What that means is that changing certain settings requires the use of both hands; one to press the corresponding button and the other to spin the dial that would change the value. The positioning of such combination often required us to remove the camera from our eyes, which we sometimes found to be an inconvenience.

Nikon boasts of the D4's novel focusing system, which throws a whopping 51 points that not only works in lower light but also works well with smaller apertures. We tossed the D4 around in some of the worst lighting imaginable – club lighting. It had no issues locking focus in the extreme low light. Focus performance was no different when the lights went on frenzy comparable to a little child experiencing a sugar rush. We even went ahead and shot

a bunch of hooligans playing a game of basketball, just to see how good the AF was at keeping track of the man with the ball. 9 out of 10 shots were keepers (and we're shooting in low light here mind you!)

Accompanying the AF chip is the 91,000 pixel sensor dedicated to the task of making sure your photos are as accurately metered and white balanced as possible. This is why despite the crazy, constantly changing lights, our exposure values were within the range of what we consider "good exposure" (maximum adjustment of 1/3 of stop) along with the focus being spot on. Following in the effectiveness of the focusing and metering systems, is the heart of the D4, a 16 megapixel full frame sensor that captures images in absolutely amazing detail. Even as the ISO numbers got bumped up from 800 to 6400 (even 8000 at one point), detail retention was stellar, while the noise levels remained extremely low.

The camera shoots fast and it shoots well. It even, for the first time in its class, offers proper full HD video recording. Once again at the club, we shot some footage and noticed our ISO jumping to 5000. When viewing that footage on 32-inch LCD, we failed to see any noise. Let that be a testament of the power that the D4 is packing.

Well, all that power and performance comes at a cost and the Nikon D4 is pegged at a price of ₹3,24,995. Peanuts if you're part of that one per cent of the elite and just a fond dream for the rest of us.

*Swapnil Matbur*



## IPv4 Vs IPv6

Those are two versions of Internet Protocols, but there is something which differs them from each other. <http://dgit.in/LVpHdE>.

## Rollable and Paper thin

Corning, popular for its Gorilla Glass technology have come out with a flexible display called Willow Glass, which can be used even in solar cells. <http://dgit.in/LtgAgw>

**Bazaar**

# BlackBerry Curve 9320

## What the 9220 should have been!

**T**he very first thing I did when I got my hands on this device was to pop open the battery cover – and yes, the same 1450 mAh battery from the 9220 is present... mind at ease, it was time to move on to other aspects.

All current-gen BlackBerry's seem to meld together in this weird double-vision way. Yes RIM could perhaps pay attention to making phones that cost more, look significantly different visually, so that users can show off – but when you have the best keyboard / keypad experience the industry has to offer, why change a thing? The 9320 looks very similar to the 9220 and also the 9300 that it's replacing.

The same individual Call, Menu and Return buttons that debuted with the 9220 are here, and they're definitely an improvement over the previous button style. The Keys are comfortable to use, and honestly, feel almost as good as the 9360's keyboard, which offered excellent feedback, despite being smallish.

Thankfully, this is a BlackBerry where the defining feature isn't as lame as FM! The 9320 has all the basics – 3G, GPS, camera with LED flash, et al.

One really cool feature is the Wi-Fi Hotspot functionality, which allows you to connect up to 5 devices, with your phone acting as a router. A great feature if you have a 3G connection that you want to share across devices or with your friends in a coffee shop, but useless if you're on a terribly slow EDGE connection like most of us.

The battery lasts a whole day, despite a vigorous usage pattern. Even with all my mails, files and

settings all transferred over from the "Switch Device" option in BlackBerry Desktop Manager, the 9320 didn't seem to slow down at all, which is another positive vote for OS 7.X over previous versions. Also, the 512 MB RAM and same amount of ROM help the 800 MHz processor ensure things stay snappy enough. The occasional hour-glass hanging that every BlackBerry user dreads does happen, but it's usually only when using App World to install or uninstall something. RIM really needs to do something about the randomness of the hangs we BlackBerry users face though.

The 3.15 MP camera with an LED flash is a huge step up from the 9300 and 9220, but is still quite bad compared to the cameras we see on other smart phones. The best camera in the Curve series is undoubtedly the one on the 9360, and even that is just average in the grand scheme of things in the smart phone world.

At a street price of about ₹15,000, the BlackBerry 9320 is just a tad over-priced in my opinion. Given that the BlackBerry Curve 9360 can be had at just about ₹2,000 more, I would recommend either waiting for the price to fall to the ₹12,500 sweet spot, or just cough up 2K more to get a better phone and camera in the BlackBerry Curve 9360.

However, if battery life is of supreme importance, and you're one of those BBM junkies who gets a million mails a day, the BlackBerry Curve 9320 might prove to be the best buy for you – the Curve 9360 does have this annoying habit of dying at least once a day from power starvation.



Those confused between the 9320 and 9360 should also consider that there are already famed updates from European carriers available for the 9360 (<http://dgit.in/LI7iAJ>). If you like, you can update the 9360 to OS 7.1.0.336 now, and enjoy all of the same goodness – WiFi Hotspot, enhanced battery life and yes, even FM functionality!

Is this a good enough upgrade for those already on, say a Curve 9300? Probably not, unless you're desperate to have OS 7.x. Our suggestion would be to wait for OS 10 devices, and run the older device as long as you can. For new BlackBerry buyers, or those upgrading from the really old 8520 or older series, this is a decent buy, and certainly a better deal than you get with the 9220.

*Robert Sovereign-Smith*

## Specifications

**Platform:** BlackBerry OS7.1;  
**RAM:** 512 MB;  
**Display:** 2.44-inch, 320x240 pixel;  
**Storage:** microSD slot up to 32GB;  
**Camera:** 3.15 MP with LED flash;  
**Battery:** 1450 mAh

## Contact

**BlackBerry India**

**Website:** <http://in.blackberry.com/purchase/>

**Price:** ₹15,000 (Street Price)



Features .....	6.0
Performance.....	7.0
Build Quality .....	6.0
Value for Money .....	6.0

## Ultrabooks with gaming chops

Gigabyte is the latest player in the Ultrabooks segment and it has tied up with NVIDIA to bring out GeForce GTX 600M graphics on their Ivy Bridge processor sporting ultrabooks



## Smartphones Vs Cameras

A list of new smartphones which come along with minimum of 8 MP and higher cameras with HD quality video recording. <http://digit.in/OQkp4a>

# Acer Aspire V5 – 571G

## Affordable laptop with great performance

Unlike the hateful glossy finish on the cousin the V3, this one has a classy matte black finish. You could probably blame it for being a tad drab, but simple doesn't always mean boring. Dimensions speak for themselves - 0.9-inches thick and 2.44kg weight.



This is powered by the Intel Core i5-2467M processor clocking at 1.6GHz, and is paired with 4GB of RAM on Intel's HM77 chipset (Panther Point), and yes, supports USB 3.0 natively. The Femi family Nvidia GeForce GT 620M (1GB) is paired with the Intel HD 3000 graphics in switchable mode.

The PC Mark Vantage score of 5855 points to solid mid range

performance. PC Mark 07's score of 1701 also verifies it. For the gamers, there is some bit of good news. The taxing 3D Mark 11 puts it in perspective - 1842 for Entry Mode, 1128 for Performance Mode and 345 in the extreme mode. The V3 is not too far behind the V5 that has a more powerful GT 630M (2GB), and will be able

to handle the latest games at medium settings.

The battery life clocked two and a half hours in the battery tests. Translate that into real life performance, and this should simply double. This one is clearly closing in on what most ultrabooks will offer.

The display is amazing - no reflectiveness, and the entirely matte quality makes this a hot favorite amongst us lot. Just be careful about keeping the brightness levels down, because it will get uncomfortable if not tamed.

For a price of around ₹40000, the Aspire V5 could be your ultrabook-ish laptop, without having to pay ultrabook prices.

*Vishal Mathur*

## Specifications

**Processor:** Intel Core i5-2467M @ 1.6GHz; **RAM:** 4GB; **Display:** 15.6-inch, 1366 x 768 pixel; **Graphics:** Nvidia GeForce GT 620M with 1GB RAM and Intel HD 3000; **Storage:** 500GB HDD; **Optical Drive:** Yes; **Connectivity:** 2 USB 2.0, 1 USB 3.0, HDMI, SD card slot, Ethernet and Wi-Fi

## Contact

**Acer India**  
**Phone:** 0120-3807200  
**Email:** [all\\_easycare@acer.co.in](mailto:all_easycare@acer.co.in)  
**Price:** ₹ 42,990

8.0/10

Features .....	8.0
Performance.....	8.0
Build Quality .....	7.0
Value for Money .....	8.5

# Sony Alpha 77

## Sony's latest frame-buster

## Specifications

**Sensor:** 24.3MP APS-C Exmor HD CMOS; **Burst rate:** 12 fps; **ISO Range:** 100 - 16000; **Shutter Speed:** 1/8000 to 30 secs;

## Contact

**Sony India**

**Phone:** 1800-103-7799

**Email:** [sonyindia.care@ap.sony.com](mailto:sonyindia.care@ap.sony.com)

**Price:** ₹69,999 (body only), ₹99,999 (Body + 16-105mm lens)

Sony's DSLRs have had a rocky start however, the Alpha 77 is a different story. There are several major innovations that make the Alpha 77 a mighty impressive APC-DSLR. It is the first crop-sensor camera to incorporate a 24.3 megapixel sensor, the highest pixel density in a crop sensor at release. One would think that a crop sensor that big would experience issues with noise at high ISO, but Sony's technical know-how has been put to good use as the A77 handles noise extremely well.

The second achievement that the Sony A77 boasts of is the ridiculously fast 12 frames per second it can shoot thanks to Sony's translucent mirror

technology. The light goes right through the translucent mirror and onto the sensor, allowing for faster frames per second. The drawback of this, however, is a dimmer than normal viewfinder, which Sony countered by packing in an Electronic View Finder. The EVF is capable of displaying a host of information, including a level gauge.

Coming to image quality, we found the colors of the A77 to be rich, though the green seemed to be a little on the stronger side. The 24 MP images are exquisitely full of detail. Video shot on the A77 also shares the same characteristics

The Sony A77 has been with ruggedness in mind, thanks to



water and dust seals present all around the camera. Also included is a three-way tilt-swivel articulated LCD, designed to help film makers get into those weird corners they've always fantasized shooting from.

The A77 is all yours for a price of INR69,999 for body only or INR 99,999 with the 16-105 lens, but we recommend buying body only along with better lenses.

*Swapnil Mathur*

8.0/10

Features .....	8.0
Performance.....	8.0
Build quality .....	8.0
Value for money .....	8.0



## GeForce GTX 680M launched

NVIDIA has announced GTX 680M its flagship single GPU for laptops expected to be seen on Alienware M17x and M18x <http://dgit.in/KJuKQI>



## Micromax A52 launched

Micromax recently launched another Android-based budget smartphone, "A52" which is powered by 1GHz processor and it is available for Rs. 5,999 <http://dgit.in/P9eeYU>

Bazaar

# HTC One V

## Possibly the best budget Android phone at the moment

In terms of the design and build, the One V does have an advantage over most of the rivals – aluminium over the traditional and generally found plastic finish. The 3.7-inch Gorilla Glass tends to stand out an mm from the rest of the body. Unfortunate fallout of this is that the glass at the top has been cut, where the earpiece sits. This can be slightly sharp when the phone is pressed against the ear.

The 3.7-inch display has a resolution of 480 x 800 pixels, and has the Gorilla Glass treatment. Straight off, we were impressed with the fact that a humble LCD was offering this kind of image and colour reproduction. However,

the real kicker was the crispness of the text, which is unbelievably good.

The One V has performance limitations but it does perform everyday routine tasks very well – Sense UI feels slick. Regular games run fine but take it up a notch to NFS Shift, and things tend to stutter at times during gameplay.

Battery life from the 1500mAh battery isn't out of the world, but performed better than what we expected. Under



medium usage scenario, this one latest a day and a half from full charge to full discharge.

The HTC One V is possibly the best budget Android phone you can buy at the moment. Not that the new Sony Ericsson Xperia NXT range is bad,

and should definitely be considered, but the One V just offers Android ICS out of the box. Retro looks work very well!

Visbal Mathur

## Specifications

**Platform:** Android 4.0;

**Processor:** Qualcomm

MSM8255 Snapdragon

1GHz; **RAM:** 512MB; **Display:**

3.7-inches, 480 x 800 pixels;

**Storage:** 4GB + micro SD

slot; **Camera:** 5MP with 720p

videos; **Battery:** 1500 mAh

## Contact

**HTC India**

**Email:** <http://www.htc.com/in/contact/>

**Phone:** 18002663566

**Price:** ₹18,299

8.0/10

Features .....	8.0
Performance.....	7.0
Build Quality .....	8.0
Value for Money .....	7.5

# Sennheiser RS 220

## A purely neutral beast

## Specifications

**Type:** Wireless headphones (HDR 220) with docking station (TR 220); **Ports:** Analog, coaxial and optical input and outputs; **Range:** 30m indoors; **Batteries:** Rechargeable

## Contact

**Sennheiser India**

**Phone:** N.A.

**Email:** [info@sennheiserindia.com](mailto:info@sennheiserindia.com)

**Price:** ₹24,990

The RS 220 headphones have the velour padding for the area around the ears, instead of traditional foam. The result – very comfortable to use even for long durations, and keeps the ears cooler than most other headphones. The generally big size of these headphones means the ears aren't stressed or crushed. The buttons on the lower part of each earcup are prone to accidental presses.

Sound quality truly justifies the humongous price tag. Audio is extremely clear, and the details are apparent as well. Strong performance for the lows and the highs, but the mids sounded tinny for the most part. Treble handling is the real



cherry on the cake – clarity is excellent, without being harsh on the ear. This is very evident when listening to a heavy metal track. Luckily, the RS 220 is a purely neutral beast, and is equally comfortable with varying content. Unlike some bass

heavy headphones, the RS 220 ensures that the bass thump is adequately matching the rest of the frequencies, but mind you, it will kick in hard when needed. Some headphones dress up the bass as muddy, in the garb of trying to appear neutral, but this one doesn't do that kind of eyewash. Even when you push the volumes to higher levels, clarity remains very much in tact, and the reproduction of the track doesn't miss out on any elements.

The only niggles with being neutral is that it will not appeal to a certain demographic – those who we lovingly call bass addicts. Being neutral is typical Sennheiser.

Visbal Mathur

7.0/10

Features .....	8.5
Performance.....	8.0
Build Quality .....	8.0
Value for Money .....	5.5

**Samsung + Gaikai = TV Gaming**

Smart TVs from Samsung will now allow consumers to play games without any need for a gaming console. <http://digit.in/KijcxW>

**AMD releases FirePro W600**

FirePro, AMD's professional range of GPUs, is designed for powering digital walls a.k.a outdoor advertising. <http://digit.in/M3BuYG>

# BenQ Joybee GP2

## Portable projector with a docking station

There are a whole bunch of design elements to the Joybee GP2. Seen from the front, you clearly see that the projector is wider at the top, and slims down towards the bottom.

This DLP projector can play back multi-media from various sources. First, we tried the conventional HDMI route, and hooked it up to a WD TV Live. The performance of HD video playback (1080p, in MKV and MP4 containers) was quite good. The sharpness was adequate, and the colours felt quite stable. Though, it did seem that red does take a slightly more visible role at certain times, for



example, with skin tones. However, black levels were a tad disappointing, and that really

and the subsequent reduction in detail. Very satisfactory brightness levels for a traditional dark projector room.

Second time around, we plugged in a 320 GB portable HDD (NTFS format) to the projector. Within 20 seconds, the entire video library was read and listed. Playback of MP4 and AVI formats didn't raise any compatibility issues. Same seamless playback from the SD card slot!

The iPod / iPhone dock is a value addition, but will appeal to anyone who uses a compatible iOS device. Plug in the device, and the on-screen menu opens up to the corresponding option.

*Visbal Mathur*

### Specifications

**Projection system:** DLP;  
**Lumens:** 200 ANSI; **Contrast Ratio:** 2400:1; **Native resolution:** 1280 x 800 pixels;  
**Ports:** Mini HDMI-in; **Media playback:** USB, SD card and iPhone / iPod dock

### Contact

**BenQ India Pvt Ltd**  
**Phone:** 18004199979  
**Email:** service-in@benq.com  
**Price:** ₹39,167

6.5/10

Features .....	8.0
Performance.....	7.5
Build Quality .....	7.0
Value for Money .....	6.0

impacts the dark areas of a scene. Fast motion scenes were handled better than a lot of more expensive projectors. Understandably SD playback wasn't as sharp. You can feel the complete lack of crispness,

# LG 72LM9500 Cinema 3D TV

## 72-inches of HD goodness

### Specifications

**Display type:** LED; **Display size:** 72-inches, 3D; **Resolution:** 1920 x 1080 pixels;  
**Up-conversion:** 2D -> 3D;  
**Connectivity:** 4 HDMI, 2 USB, Intel WiDi

### Contact

**LG Electronics India**  
**Email:** N.A.  
**Phone:** 18001809999  
**Price:** ₹7,00,000

7.0/10

Features .....	8.5
Performance.....	8.0
Build Quality .....	8.0
Value for Money .....	5.0

The LM95 has slightly different finish to what we see with conventional televisions – brushed metal as against the more conventional black, and the even worse glossy black.

The 72-inch LM95 handles HD content with sheer excellence. But here also, it is a case of two halves – one excellent, and one not so good. If you play 1080p files on this huge TV, the playback quality will be excellent. The crispness of the reproduced is clearly visible, something that can be understood even when you turn down the sharpness slider to 0.

While the display quality and clarity is great, the black

levels could have done with a bit of improvement. The blacks need to be deeper, and there are clearly times when you feel the need for that. In the Spyder benchmark test, we got a contrast ratio of 537:1, which is lower than the 700:1 we got for the LG 42LW6500 Cinema 3D TV.

Shifting to content with a lower resolution, and the LG

LM85 feels strained. The difference between 1080p and 720p was very clearly visible. Meant only for the home theater!

3D playback is excellent, and for a 72-inch display, the resultant experience is just amazing. Even the 2D to 3D up-converted content is surprisingly good – no ghosting issues. The depth, from the outset, is quite good. This can be tweaked as well. Passive (or FPR) 3D glasses just make the experience a lot more comfortable.

What is slightly interesting is the difference between a 65-inch LED television, and this 72-inch one. The Sony Bravia 65HX925 that has a box price of ₹359,000.



*Visbal Mathur*

## Gigabyte Smartphones anyone?

It's rumoured that Gigabyte is coming out with four dual-SIM Android handsets which will sport Ice Cream Sandwich. <http://dgit.in/Mg95Ha>



## Canon 650D rumours

Specifications of the EOS 650D may include an 18MP APS-C sensor, 9 crosstype focus points, improved hybrid AF, T3i metering among others. <http://dgit.in/L6gSgn>

Bazaar

# Dell M110

## A very compact projector

With good build quality throughout, the projector feels like a premium device, with no rough edges at all. The only issue is the cramped layout of the ports.

The Dell M110 has more brightness power, at least on paper – 300 ANSI lumens, against 200 ANSI lumens offered by the BenQ Joybee GP2. However, it didn't really make too much difference, because in exactly the same setup with exactly the same content, both projectors looked to be reproducing similar results.

We first tested the video quality by connecting the projector to an HDMI source – WD



Live. Colour seemed even for the most part, on the standard setting. Take the setting up a notch towards vivid, and while it looks good for a while, the reds tend to become overbearing. Crispness seemed to be fine with HD content, but a distinct lack of it with SD content. The Dell M110 definitely had deeper blacks than the BenQ Joybee GP2.

Plug in a USB drive, and straightaway, we had a

problem. Unlike the Joybee GP2, the Dell M110 did not detect an NTFS drive. Switching to FAT 32, the interface opened up, categorising the files into Movies, Music and Pictures. The playback was very disappointing – constant stuttering. Both AVI and MP4 playback was bad. It refused to detect any MKV files. Compared to the BenQ Joybee GP2, the M110's shortcomings get magnified a bit. The GP2 detected all drives, and played back all the AVI and MP4 files we threw at it.

Visbal Mathur

## Specifications

**Projection system:** DLP;  
**Lumens:** 300 ANSI; **Contrast Ratio:** 1000:1; **Native resolution:** 1280 x 800 pixels;  
**Ports:** HDMI; **Media playback:** USB, microSD card

## Contact

**Dell India**  
**Phone:** 08025068026  
**Email:** N.A.  
**Price:** ₹33,000

5.5/10

Features ..... 7.0  
Performance ..... 5.5  
Build quality ..... 8.5  
Value for money ..... 4.0

# Olympus SZ-31MR

## Elegant travel zoom with not-so-elegant high ISO chops

## Specifications

**Sensor:** 16MP BSI CMOS;  
**Optical Zoom:** 24x; **Screen size:** 3-inch touch LCD;  
**Aperture:** f/3.0 to f/6.9; **ISO Range:** 80 - 6400

## Contact

**Olympus Imaging India Pvt. Ltd**  
**Phone:** +91 22 6142 0400  
**Email:** [inquiry@olympus.in](mailto:inquiry@olympus.in)  
**Website:** [www.olympus-imaging.co.in](http://www.olympus-imaging.co.in)  
**Price:** ₹25,990

7.5/10

Features ..... 8.5  
Performance ..... 7.5  
Build Quality ..... 8.0  
Value for Money ..... 5.0

This travel zoom has a slightly bulky body (still very much pocketable), but rather curvaceous design. The hand grip juts out quite sharp, curving back in to form an interesting hump.

The top of the camera features only the shutter button (along with the zoom toggle) and a mode dial.

Packed with a 16 megapixel slab of silicon along with Olympus's proprietary Dual TruPic V image processing chips, a 24x optical zoom lens (25-600mm equivalent) allows you to capture exactly what you want, whether it's a wide angle shot or something that's far off in the distance. Does it really perform?

Image quality at both the widest and the most telephoto end was surprisingly good with very little JPG compression artefacts. The dynamic range seemed to be on the lower end though, with a tendency for the camera to focus more on the shadows, and consequently, blow out the highlights. With a 1/2.3 inch sensor, one can't expect really high dynamic range, but we do wish the camera would have struck a better balance between the highlights and the shadows. Colour reproduction was excellent with vivid greens, rich blues and deep reds being rendered just as such; vivid, rich and deep.



In our test shots at ISO 800, the edge sharpness seemed to drop noticeably, along with noise reduction algorithms becoming a little aggressive.

The video resolution on the SZ-31MR is full HD and as one would expect, the video quality is superb. All in all, the Olympus SZ-31 MR is a feature packed camera with fairly decent image and video quality.

Swapnil Mathur



# Bazaar

mini <sup>QUICK</sup> INSIGHTS FROM INDEPTH TESTS

The Digit Test Centre receives hundreds of products every month. Each of these products is put through a series of tests, and is finally given a verdict. The final score is arrived at after considering a number of factors and evaluating them in terms of features, performance, value for money, build quality, and, in the case of software, even ease of use.

For better understanding of our ratings, here's a quick guide to our overall score

- 1.0 - 3.0 - Extremely poor product. Keep away!
- 3.5 - 5.0 - Strictly OK. Not recommended
- 5.5 - 6.5 - Decent product. Go for it, but there may be better products out there.
- 7.0 - 8.5 - Very good product. Highly recommended.
- 9.0-10.0 - Ground-breaking product. We've never seen anything like it before. A definite must buy!



## Schedule tweets using Buffer

Instead of inflicting your followers with a barrage of tweets, spread out your tweets throughout the day using Buffer. <http://dgit.in/LaqwPz>

### LAPTOPS



#### Acer Aspire V3 – 571G

Price: ₹ 43,990

### GRAPHICS CARD



#### ZOTAC GTX 670 AMP! Edition

Price: ₹ 30,999

### SPECIFICATIONS

Processor.....Intel Core i5-2450M  
RAM..... 4GB DDR3  
Display ..... 15.6-inch;  
Graphics..... NVIDIA GT 630M

Core Clock.....1098 MHz  
Memory ..... 2GB GDDR5  
Memory Interface.....256-bit  
Ports.....2xDVI, 1xHDMI, 1xDP

### TEST CENTRE RATINGS (All Scores out of 10)

#### Features.....9.0

On paper, the Aspire V3 looks like a very powerful package. It sports a chiclet keyboard and a single USB 3.0 port.

#### Performance ..... 7.5

It really isn't a surprise that the Aspire V3 blazed through the benchmark tests. PC Mark Vantage's score of 7569. Cinebench R11.5 (CPU multi-core): 2.7

#### Build Quality.....6.0

Glossiest laptops we have seen in a long time. Humble plastic does very well in being classy. Solidly put together.

#### Value for money ..... 8.0

At ₹43,990, the Acer Aspire V3 is a steal for its performance!

#### Features.....8.5

Overclocked by 20 per cent as compared to stock GTX 670. Has a two-fan design with four heat pipes and a triple-slot design.

#### Performance .....9.0

Beats the stock GTX 680 in most benchmarks. Alien Vs Predator at 1080p Max gave 7fps higher than GTX 680.

#### Build Quality.....8.0

Sturdy metal cover. 80 mm fans provide ample cooling.

#### Value for money.....8.0

Price on the higher side but cheaper than a stock GTX 680.

### WE SAY

8.0

This is the closest Acer has come to the gaming notebook category. The tentative steps are understandable, but performance figures show that the Aspire V3 is one of the most powerful laptops out there. Only two things going against it: glossy finish and the slightly bulky form factor. What you are getting is a powerhouse with very decent graphics capabilities without having to spend a lot of money for it. Does have its share of design shortcomings which can be overlooked in lieu of performance.

8.5

ZOTAC GTX 670 AMP Edition beats the stock GTX 680 in most of the benchmarks and comes at a lesser price. The two-fan design ensures that there is sufficient cooling, so higher temperatures are not an issue as we have experienced in previous generation AMP edition cards. Only nitpicking we could manage was that the card was bulky with heat pipes coming out. Load temperatures were under 80 degrees, which isn't bad at all. This card has winner written all over it.



## VisuZ CLD launched

Priced at Rs. 19,500 the filter screen that attached itself to your LCD/LED promises to turn 2D to 3D. <http://dgit.in/MkehgG>

## Inside Gaikai HQ

Cloud gaming has got a shot in the arm with NVIDIA's recent GRID announcement. Here is the company that is an established player in the segment. <http://dgit.in/LbrZoG>

**Bazaar mini**

### BLUETOOTH HEADSET



#### Jabra Easycall

Price: ₹2,319



#### Jabra Clipper

Price: ₹2,899

### SOFTWARE



#### Parallels Desktop 7

Price: ₹3,999

### HARD DRIVE



#### Seagate Momentus XT 750GB

Price: ₹10,000

### SPECIFICATIONS

Type.....Bluetooth headset  
Bluetooth .....3.0 with A2DP  
Notifications.....Yes  
Battery .....Yes

Type.....Bluetooth headset  
Bluetooth version.....2.1 with A2DP  
Talktime.....6 hours

OS Support.....OSX,  
Windows (XP, 7, Vista, Server 2003 and  
Server 2008)  
Minimum memory.....2 GB

Unformatted space.....698.64 GB  
Rotational speed.....7200 RPM  
Cache memory .....32 MB  
Interface .....SATA III 6 Gbps

### TEST CENTRE RATINGS (All scores out of 10)

#### Features.....8.0

Pretty standard stuff on the spec sheet from the Jabra Easycall, and doesn't complicate matters where simplicity works.

#### Performance .....7.5

This is very simple to setup and use. Very good voice quality, for the most part. Excellent battery life.

#### Build quality .....7.0

Easycall is possibly the most run of the mill design for those having used flashy bluetooth headsets.

#### Value for money.....8.5

For a price of around ₹2,300, it makes for a great purchase.

#### Features.....6.5

Bluetooth with A2DP, pair with two phones, control playback device volume, the jazz.

#### Performance .....7.0

Clear call quality, which doesn't get punched out by ambient noise, mostly due to the in-ear nature of the earphones.

#### Build Quality.....5.5

It was surprising to find the Clipper look and feel quite plasticky.

#### Value for money.....6.0

At ₹2,899 it's not pricey. Will appeal to a limited demographic.

#### Features.....8.0

The best feature is the Coherence Mode, which blends OSX with Windows (or any OS).

#### Performance .....6.0

Running the Office suite and a few browser windows should be an easy task, but don't expect the heavier image editing suites to work smooth.

#### Ease Of Use .....7.0

Installation is quite straightforward.

#### Value for money.....8.0

At ₹3,999, it makes for a good value for money proposition.

#### Features.....8.0

It's a hybrid drive housing 8 GB SLC NAND memory which offers higher number of program/erase cycles than MLC NAND.

#### Performance .....8.0

Sequential Read/Write (MB/s): 112.5 / 98.1; Assorted Read/Write (MB/s): 116.94 / 90.2. It is 20 per cent better than Momentus XT 500GB drive.

#### Build Quality.....8.0

Extremely sturdy build quality.

#### Value for money.....6.0

At a cost per GB of ₹14.31 it is a bit on the higher side.

### WE SAY

**8.0**

As is always the case with Bluetooth headsets, comfort level and long duration wearability totally depends on an individual, and the kind of ear shape. If you get past that hurdle, the Easycall from Jabra is probably one of the simplest headsets you can lay your hands on. We are impressed by the overall performance of the device, and unlike most other headsets in the same price category, this one feels premium and has no "budget" look and feel to it.

**6.5**

After the truly stunning efforts, build quality wise, of the Wave Red and the Easycall, it was disappointing to find the plasticky looks and build of the Clipper. As a Bluetooth headset, this one appeals to those who like the in-ear earphones, and want audio in both ears, like a traditional headset. Connectivity is Bluetooth, but this will give the looks of a wired headset from far. Very good call quality though, since you won't be bothered too much by ambient noise. The Clipper will appeal to those who want the complete stereo effect during calls!

**8.0**

Seamless integration of Windows and OSX, not to mention the ability to recognize hardware that a Mac may not play nice with (such as some cameras and USB drives) is quite impressive. The programs open up without a hiccup and work reliably, convincing us that Parallels Desktop 7 is something that anyone who uses multiple OSes must have. Parallels Desktop 7 offers the ability to not only run Windows, but even Linux (and its several flavors) and Solaris amongst many others. It's a small price to pay for ridding oneself of the frustration of having to reboot every time on needed to switch between OSes.

**7.5**

Hard drive prices are not going to come down till another year, but Seagate Momentus XT offers an 8GB of SLC NAND memory which improves access times, reducing application loading times for frequently used programs. Performance improvements over the older Momentus XT drive are significant. In fact in most tests, it beat the WD 750 GB Scorpio Black drive, thanks to SATA 3 connectivity and higher buffer speed. Offers improved speeds and better performance than competing laptop drives.

**Price Watch**

Get the latest prices of cellphones, travel zoom cameras and budget tablets

**Killer Rigs**

Want to build a system but don't know what components to buy? Read on to know more.

# Travel Zoom Cameras

How to pick the right companion for your trip

Agent 001

agent001@thinkdigit.com

**S**o you've got that all important vacation coming up, the one you've been planning for the longest time. And you discover that your camera is busted. Happened to me and after I was done raging about finding my camera busted right before the all-important trip, I used it as an excuse to buy myself a nice travel zoom. Cue in travel zooms that have a pocket friendly form factor and pack in a deviously large optical zoom lenses, all the while packing in newer features. However, it is a delicate balance between form and features. Before you decide to splurge on a travel zoom, there are a few things to keep in mind.

## 1) Megapixel Mischief:

Megapixel count has been one of the most effective marketing tools for camera makers to sell cameras. The notion that more megapixels mean more quality is quite deeply rooted, that is not the case. When considering a point-and-shoot, the best megapixel count lies between 12-16 megapixels. A funny story comes to mind here. I've often heard salesmen say, "Sirjee, this is 20 megapixel. Must better than 12 megapixel. You get 8 megapixels more for just 5K." After mentally facepalming myself a few times, I step in and put the spread of misinformation to rest.

## 2) The Tough Kid on the Block:

Going through the Butter-Finger syndrome is terrible, especially if you're holding a camera. We recommend buying something that feels sturdy and solid and not like cheap plastic. For example, the SZ7, which is a ridiculously slim travel zoom, however, the construction of the camera makes me want to put this thing in a case, and not my pockets. I was too worried about how it would get along with the contents of my pocket, and if it did decide

to wage war against the residents of said pockets, I was pretty sure it would lose. Bring in the Canon SX240 HS on the other hand and I wasn't worried a bit about letting it slide into the one pocket that contains enough change to put most beggars to shame.


## 3) Mine's bigger than yours:

The zoom rating on cameras might rock the same number, but there is a possibility that they are actually much different. The "x" number is determined by dividing the farthest a lens can zoom by the widest it can be. For example, a lens that can go from 25 mm on the wide end to 250 mm on the telephoto end has an optical zoom of 10x. Ideally, you want something that gives you a good wide end as well as a decent telephoto end. Ideally something between 25mm and 400mm. A perfect example is the Panasonic TZ-30 and the Sony HX-20V. Both have a "20x optical zoom tag", however, the Panasonic's zoom range is 24mm-480mm and the Sony frolics in the 25mm-500mm range. So on the side end, they're both very comparable, but on the telephoto end, that

20mm could make quite a bit of difference.

## 4) Cameras on a Powertrip:

One area where cameras have not seen much progress is the battery life. Most of these cameras are rated for about 200-250 shots on full charge (at best) so we strongly recommend buying extra batteries to boot. The Sony HX 20V currently claims the highest battery life (about 250 shots), but real life usage would considerably decrease that. Regardless, a few spares never hurt anyone (unless you chuck them real hard at someone, +50 points if it hits their face).

In conclusion, let me break it down for you and save your countless days' worth of online reading. If you're looking for an all-round performer, the Canon SX240 HS (or the SX260 HS as it has a GPS chip, but we don't like those) is my recommendation. The Sony HX 20V is a VERY good alternative, but is priced somewhat higher than the SX240 HS. If you're looking to cruise the currents that flow below the 15K mark, the Nikon Coolpix S8200 is a decent buy and if you're absolutely clear that you want something small, compact and light, then stick with the Panasonic SZ7. 





## Industry Connect

We spoke to Qualcomm's Dr. Sandeep Sibal about Snapdragon, Krait and other SoCs. Read on if the heart of mobile devices interest you



## Fine tuning the Fox

Read all about customizing Firefox using about:config here..  
<http://dgit.in/LljnOC>

Agent 001

### Digicam dilemma

I want to purchase a digital camera within a range of ₹7,000 to 8000. Kindly suggest me a good featured camera with facilities such as ample modes, good megapixel count, good zoom and HD video capability.

Is Canon IXUS a good choice? If so, kindly suggest me the model number. I have shortlisted Nikon S30, Canon PowerShot A3200IS and Sony DSC-W620.

Out of these which camera should I consider buying?

*S Patel, Mumbai.*

In the range that you have mentioned, it will be difficult to procure a Canon IXUS camera with the kind of modes you are looking for. If you want just the Auto and Program modes, then you have the right budget, but if you want these modes: Auto, Program, Aperture Priority, Shutter Priority, Manual (P/A/S/M); then you will have to slightly stretch your budget.

Nikon S30 is meant to be used as a rugged camera, ideal for water-sports and it is purpose-built for that. Canon Powershot A3200IS is an entry level Canon with only Auto and Program modes alongwith scene modes. It is a good entry level camera at a decent price. Sony DSC-W620 is an entry level compact from Sony having a decent feature set for a comparatively higher price than A3200IS. Both Canon and Sony make for decent entry level compacts. If you can stretch your budget to around ₹9,000 you can get the Canon PowerShot SX150IS which is a feature rich camera with great optical zoom and P/A/S/M modes.

### Gaming rig query

I am a tenth grade student. I want to build a gaming rig around a budget of ₹55,000. My main uses are:

- Gaming
- Programming
- Video Editing and Rendering

*Manan Barjatya*

You can opt for the following configuration. Also keep a tab on the Killer Rigs section of our magazine which has rigs for various budgets and use-case scenarios.

Processor:

Processor	Intel Core i5-2400	11200
Motherboard	MSI-H67 MA-E35	4600
RAM	G-skill F3-10600CL9S-GBNT	1200
HDD	WD Caviar Blue 500GB	4000
Monitor	Samsung P2350	10800
Graphics Card	Zotac NVIDIA 560ti	13000
Cabinet	Cooler Master Elite 430	2700
PSU	Seasonic S12 II 520	4100
Speaker	Altec Lansing V2621	1900
Mouse	Razer Abyssus (bundled)	0
Optical Drive	LG 22x SATA DVD Writer	950
Keyboard	Razer Cyclosa (Bundled)	2250
<b>Total</b>		<b>56700</b>

### Entry level graphics card

I need to purchase a graphics card which does not require an extra power connection for my desktop. My budget is around ₹4,500.



PowerColor Radeon HD 6670

My PC configuration is as follows:

- Processor: Intel Pentium E2180
- Motherboard: Biostar g41d3c
- RAM: Corsair 2 GB DDR3
- OS: Windows 7 Ultimate 32-bit
- Monitor: Dell 22-inch
- PSU: Iball 400 Watt

I want to play the latest games and am willing to play them on low to medium settings as well.

*Pankaj Kumar*

You can get the following cards which are within the budget you have specified. Do note that gaming on these cards is possible only on medium to low settings. Also you will have to keep settings such as tessellation, anti-aliasing, anisotropic filtering etc., on the lower side as that will affect your frame rates on these low end cards.

- MSI N440GT (<http://goo.gl/F6w8G>) ₹4,000
- Gigabyte HD 6670 – ₹4,500 (<http://goo.gl/SYDaK>)
- PowerColor RADEON HD 6670 – ₹4,809 (<http://goo.gl/s9Erz>)

## ASUS Optical Drive

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**Google latest acquisitions**

Google recently acquired Quick Office, a productivity suite for Android & iOS devices. They also acquired Meebo, an excellent IM services all over the web

**Skaterboy**

Skater Boy is a new rising addiction for Android users. Easy to play & compatible with almost all kinds of Android phones. <http://dgit.in/ND3QdT>

# SPEND SMART

Updated prices of Cellphones, Budget Tablets and Travel Zoom cameras



## CELLPHONES

Brand	Model Name	Operating System	Processor (in MHz)	Display size (in inches)	Primary Camera resolution (in MP)	Price (in ₹)
Samsung	Galaxy Ace S5830	Android 2.3	800	3.5	5	11,400
Samsung	Galaxy Ace Duos I589	Android 2.3	800	3.5	3.15	13,490
Samsung	Galaxy Ace Duos S6802	Android 2.3	832	3.5	5	13,299
Samsung	Galaxy Ace Plus S7500	Android 2.3	1000	3.65	5	15,500
Samsung	Omnia W I8350	WP 7	1400	3.7	5	15,200
Samsung	Wave III S8600	Bada 2.0	1400	4	5	15,900
Samsung	Galaxy S Advance i9070	Android 2.3	1000	4	5	23,999
Samsung	Galaxy S2 I9100	Android 2.3	1200	4.27	8	27,900
Samsung	Galaxy Note n-7000	Android 2.3	1400	5.3	8	32,700
Nokia	500	Symbian Anna	1000	3.2	5	9,525
Nokia	Asha 300	Symbian S40	1000	2.4	5	6,155
Nokia	Asha 302	Symbian S40	1000	2.4	3.2	6,285
Nokia	Asha 303	Symbian S40	1000	2.6	3.2	7,765
Nokia	E5	Symbian v9.3	600	2.36	5	9,399
Nokia	Lumia 710	WP 7.5	1400	3.7	5	15,240
Nokia	603	Symbian Belle	1000	3.5	5	12,860
Nokia	E6	Symbian Anna	680	2.46	8	17,100
Nokia	700	Symbian Belle	1000	3.2	5	16,190
Nokia	N8	Symbian v3	680	3.5	12	18,899
Nokia	Lumia 800	WP 7.5	1400	3.7	8	23,585
Nokia	PureView 808	Symbian Belle	1300	4	41	32,499
Nokia	E7	Symbian Anna	680	4	8	20,775
HTC	Desire C	Android 4.0	600	3.5	5	14,999
HTC	Wildfire S	Android 2.3	600	3.2	5	13,599
HTC	ChaCha	Android 2.3	800	2.6	5	12,499
HTC	One V	Android 4.0	1000	3.7	5	18,599
HTC	Desire V	Android 4.0	1000	4	5	21,999
HTC	Radar	WP 7.5	1000	3.8	5	18,999
HTC	EVO 3D	Android 2.3	1200	4.3	5	24,999
HTC	One S	Android 4.0	1700	4.3	8	33,590
HTC	One X	Android 4.0	1500	4.7	8	36,099
HTC	Sensation XE	Android 2.3	1500	4.3	8	32,400
HTC	Sensation XL	Android 2.3	1500	4.7	8	37,500
Sony Ericsson	Xperia Mini ST15i	Android 2.3	1000	3	5	12,099
Sony Ericsson	Walkman WT19i	Android 2.3	1000	3.2	5	13,549
Sony Ericsson	Xperia Mini Pro SK17i	Android 2.3	1000	3	5	14,499
Sony Ericsson	Xperia Neo V	Android 2.3	1000	3.7	5	18,000
Sony Ericsson	Xperia Ray ST18i	Android 2.3	1000	3.3	8.1	18,700
Sony Ericsson	Xperia Pro	Android 2.3	1000	3.7	8.1	20,030
Sony Ericsson	Xperia Arc S	Android 2.3	1400	4.2	8.1	24,999
Sony Ericsson	Xperia Active ST17i	Android 2.3	1000	3	5	19,800
BlackBerry	Curve 9220	BB OS7.1	600	2.44	2	10,990
BlackBerry	Curve 9330	BB OS6.0	600	2.46	2	15,250
BlackBerry	Curve 9320	BB OS7.1	600	2.44	3.2	15,500
Micromax	A70	Android 2.2	600	3.2	5	7,500

## Coding goes social

The Mozilla Webmaker program launched a Summer Code Party, to help people learn what goes into making the web. <http://dgit.in/LiuYhn>



## Dumping your BF?

Why don't you wait for two more weeks? An iOS app will help you to decide on the basis of the results of its two weeks' survey. <http://dgit.in/LrkwjE>

Price Watch



## BUDGET TABLETS

Brand	Model	Processor	RAM (MB)	Resolution	WiFi/3G	Price (in ₹)
Mercury	Mtab	Telechip Cortex A8	512	480x800	Y/Y	10,000
Beetel	Magiq	Qualcomm Snapdragon S2	512	480x800	Y/Y	9,999
Reliance	3G Tab	ARM 11	512	480x800	Y/Y	12,999
iBall	Slide	ARM Cortex A8	512	480x800	Y/Y	12,499
Blackberry	Playbook	ARM Cortex A9	1024	1024x600	Y/N	13,990
Zync	Z-990	ARM Cortex A7	1024	480x800	Y/N	8,990
iBerry	Auxus AX02	ARM Cortex A8	1024	480x800	Y/N	9,990
HCL	Me Tablet U1	ARM Cortex A8	512	480x800	Y/N	7,999
Micromax	Funbook	ARM Cortex A8	512	480x800	Y/N	6,499
Intex	iTab	ARM Cortex A8	512	800x600	Y/N	11,900
WishTel	Ira Thing	NA	512	480x800	Y/N	6,500
Beetel	Magiq Glide	ARM Cortex A7	512	480x800	Y/Y	11,999
Zync	Z909 Plus	ARM 11	256	480x800	Y/N	5,990
Milagrow	MGPT02 Women tabtop	ARM Cortex A7	512	800x600	Y/N	9,990
Mercury	Mtab Neo 2	ARM Cortex A8	512	480x800	Y/Y	14,999



## TRAVEL ZOOM CAMERAS

Brand	Model	Resolution (in MP)	Optical Zoom	Video resolution	Aperture Range	Price (in ₹)
Nikon	Coolpix S6300	16	10x	1920x1080	f/3.2 - f/5.8	12,450
Samsung	WB150F	14	18x	1280x720	f/3.2 - f/5.8	12,900
Panasonic	DMC-SZ7	14	10x	1920x1080	f/3.1 - f/5.9	12,990
Nikon	Coolpix S8200	16	14x	1920x1080	f/3.3 - f/5.9	14,450
Panasonic	DMC-TZ25	12	16x	1920x1080	f/3.3 - f/5.9	15,990
Nikon	Coolpix S9300	16	18x	1920x1080	f/3.5 - f/5.9	17,950
Panasonic	DMC-TZ20	14	16x	1920x1080	f/3.3 - f/5.9	17,990
Sony	HSC-HX10V	18	18x	1920x1080	f/3.3 - f/5.9	17,990
Nikon	S9300	16	18x	1920x1080	f/3.5 - f/5.9	18,950
Panasonic	DMC-TZ20	14	20x	1920x1080	f/3.3 - f/6.4	19,990
Canon	SX240HS	12	20x	1920x1080	f/3.5 - f/6.8	19,995
Sony	DSC-HX20V	18	20x	1920x1080	f/3.2 - f/5.8	22,990
Canon	SX260HS	12	20x	1920x1080	f/3.5 - f/6.8	22,995

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■ Basic rig = ₹22,515 ■ HTPC = ₹26,200 ■ Entry-level gaming = ₹38,615 ■ Mid-range gaming = ₹55,671 ■ Ultra high-end = ₹1,71,280

## BASIC RIG

Processor	AMD Athlon 2 x2 260	3,300
Motherboard	ASUS M5A78L-M LX	2,700
RAM	Corsair Desktop RAM 2GB DDR3 1333MHz	700
HDD	Seagate 1TB	5,400
Monitor	BenQ G610HDAL	4,000
Graphics Card	None	0
Cabinet	Cooler Master Elite 310	1,800
PSU	FSP Saga II 400W	2,000
Speaker (2.1)	Altec Classic Audio BXR1221	1,200
Mouse	Zebronics Judwaa 5 (Bundle)	0
Optical Drive	LG 22x SATA DVD Writer	950
Keyboard	Zebronics Judwaa 5 (Bundle)	465
Sound Card	None	0
Total		22,515

## HTPC

Processor	Bundled	0
Motherboard	MSI E350IA-E45	10,000
RAM	Corsair 2GB DDR3 1333MHz	700
HDD	Seagate Barracuda 3 TB	10,000
Monitor	None (your TV)	0
Graphics Card	None (HD6310 onboard)	0
Cabinet	iBall Elegance	1,800
PSU	Bundled (250W)	0
Speaker	None	0
Mouse	MS Wireless laser Combo XVA-00020	2,750
Keyboard	Bundled	0
Optical Drive	LG 22x SATA DVD Writer	950
Sound Card	None	0
Total		26,200

## ENTRY-LEVEL GAMING

Processor	AMD A6-3650	5,600
Motherboard	Gigabyte GA-A55M-DS2	4,000
RAM	G-skill F3-10600CL9S-4GBNT	1,200
HDD	Seagate 1TB	5,400
Monitor	BenQ G2222HD	7,000
Graphics Card	Asus 550Ti	8,000
Cabinet	Cooler Master Elite 310	1,800
PSU	Corsair CX430	2,400
Speaker	Altec Lansing V2621	1,800
Mouse	Zebronics Judwaa 5 (Bundle)	0
Optical Drive	LG 22x SATA DVD Writer	950
Keyboard	Zebronics Judwaa 5 (Bundle)	465
Sound Card	None	0
Total		38,615

## MID-RANGE GAMING

Processor	Intel Core i5-2400	11,000
Motherboard	MSI-H67 MA-E35	4,600
RAM	Corsair CML8GX3M2A1333C9	2,871
HDD	Seagate 1TB	5,400
Monitor	BenQ G2222HD	7,000
Graphics Card	Zotac nVidia 560	13,000
Cabinet	Cooler Master Elite 430	2,700
PSU	Seasonic S12 II 520	4,000
Speaker	Altec Lansing V2621	1,900
Mouse	Razer Abyssus (bundled)	0
Optical Drive	LG 22x SATA DVD Writer	950
Keyboard	Razer Cyclosa (Bundled)	2,250
Sound Card	None	0
Total		55,671

## ULTRA HIGH-END GAMING

Processor	Intel Core i7-2600K	17,500
Motherboard	Gigabyte Z77X-UD5H	20,700
RAM	Gskill F3-12800CL9D-8GBXL	3,100
HDD	2x Seagate 1 TB + OCZ 2.5 SSD VTX3-25SAT3-120G	23,580
Monitor	BenQ XL2410T	26,000
Graphics Card	ASUS nVidia GTX 680 2GB	36,000
Cabinet	Cooler Master HAF922	8,000
PSU	Seasonic X850 (80+ Gold)	10,000
Speaker	Logitech Z506	6,700
Mouse	Logitech G9x	5,000
Optical Drive	LG 12x Blu-ray OEM RW	5,000
Keyboard	Logitech G510	5,000
Sound Card	ASUS Xonar DX 7.1	4,700
Total		1,71,280

## OPTIONAL ACCESSORIES

Speakers (5.1)	Logitech Z5500	18,500
Controller	Xbox360 Controller (wired)	1,350
Controller	Logitech G25 Racing Wheel	17,000
Webcam	Microsoft LifeCam HD	2,000
Headset	Creative Tactic Sigma	4,000
System Fans	Noctua NF-P12-1300 120mm Case Fan	1,000
System Fans	Noctua NF-P14 FLX 140mm Case Fan	1,200
Sound Card	ASUS Xonar Essence STX	7,500
USB Hub	Belkin 7 port USB HUB	1,000
Wireless router	TP-LINK TD-W8951ND	2,000
CPU Cooler	Noctua NH-D14	5,250
CPU Cooler	Coolermaster Hyper TX3	1,500
Thermal Paste	Arctic Cooling MX2	500



## Recharge via twitter

Tata Docomo's e-commerce initiative, Twittcom, allows its prepaid customers to recharge their account using #Hashtags <http://dgit.in/Kc4bnx>

## Google domains

The company has applied for suffixes such as .google and .youtube to 'explore potential source of innovation on web'

# Why SoC serious?

Dr. Sandeep Sibal of Qualcomm spoke to us on the future of the Snapdragon SoC ecosystem, the philosophy behind designing power efficient SoCs and more. An excerpt...

Nimish Sawant

[nimish.sawant@thinkdigit.com](mailto:nimish.sawant@thinkdigit.com)

**Q** Considering there is such a race amongst system-on-chip (SoC) manufacturers with so many smartphones and tablets sporting them, what is Qualcomm doing to stand out of the crowd? What would you want an end user to know about the advantages of the Snapdragon SoC vis-a-vis the competition? Competition is good for consumers and the industry and we at Qualcomm welcome competition. It forces everyone to innovate and bring out compelling products. We have established smartphone SoC leadership for Snapdragon processors by engineering excellence into all key parameters including CPU performance, graphics, connectivity and power efficiency.

Unlike many of our competitors, we design our own CPU micro-architecture from the ground up with mobile requirements in mind. Delivering the best mobile experience is all about combining leading technologies and integrating them into a single solution. This is what Qualcomm customers have come to expect from Snapdragon.

**Q** With the manufacturing processes reducing in size – S1-65nm, S2 and S3 – 45nm and S4 – 28nm, the power consumed does come down, but what are the other challenges faced and how do you overcome them?

Although reducing the size of the process technology used in manufacturing process does help in lowering the power consumption, significant additional power savings can be accrued by optimizing the architecture of various CPU cores on the chipset. For example, Snapdragon uses independent power and frequency controls for



Dr. Sandeep Sibal, Country Manager and Vice President – Business Development, Qualcomm India and South Asia

each of its cores. This helps us run them in accordance with the processing load and avoid any undesirable wastage as well as any thermal radiation issues.

Unique to Qualcomm, our dual-core and quad-core Snapdragon processors feature asynchronous technology that can throttle each core independently. This ensures the phone always uses the optimal amount of CPU power for the task at hand without draining battery life. This results in a speedy, responsive smartphone that lasts you the whole day.

**Q** Nowadays smartphones come with dual-core processors or even quad-core processors. But are there enough apps that make use of so many cores?

Currently, very few mobile applications are optimized to take advantage of quad-core CPUs. For that reason, we at Qualcomm focus on designing highly efficient and intelligent quad-core CPUs so that the Snapdragon processor is optimized to provide the best user experience rather than rushing to be first to market. By the time that Snapdragon-enabled devices featuring quad core CPUs are ready to come to market in the second half of 2012,

the mobile developer community will be ready to begin providing apps capable of harnessing the power of smartphones and tablets with these capabilities.

**Q** Could you elaborate on how you keep the power consumption lower in the Krait processor on the S4? It is said that in the Krait CPU, due to the use of asynchronous multi-processing, each CPU core has an individual clock. Will that not add power circuitry on the die?

As discussed above, asynchronous multi-processor architecture, ensures the phone always uses the optimal amount of CPU power for the task at hand without draining battery life.

For example, our Snapdragon APQ8064 is a system on chip that includes four Krait CPUs in addition to the Adreno GPU, dedicated video and audio processors and a host of other components. We then integrate all of these advanced technology parts into one fully integrated system on chip. We believe this integrated approach results in better overall performance at lower power. On a pure CPU level, clearly, with more CPU cores comes increased mobile processing performance. However, it is important to note that more CPU or GPU cores do not necessarily mean a better mobile device or user experience. Otherwise, more cores can drain battery life at a very high rate. Qualcomm builds its Snapdragon processors from the ground up, tightly integrating the hardware and software. This ensures optimal power efficiency for both our dual-core and quad-core versions. It's about the user experience, not number of cores in the device.

Adding asynchronous multi-processing capability does add a little circuitry but it is insignificant when compared to the benefit it brings by reducing unwanted power consumption, and allowing each core to operate at optimal efficiency. It involves significantly less circuitry than adding an additional core as some of our competitors have done. Read more at: [http://dgit.in/qualcomm\\_july2012](http://dgit.in/qualcomm_july2012)

# Cloud printing solutions

Find out how you can order prints from your regular printer remotely



Paanini Navilekar  
[readersletters@tbinkdigit.com](mailto:readersletters@tbinkdigit.com)

Recent years have seen a great emphasis on storing items in the cloud, for reasons of portability and data security. A greater dependence on the cloud can ease one's life greatly, as cloud services can store personal data, apps and settings, and have it synchronize with all your internet-enabled devices. However, the concept of sharing actual, physical hardware devices is something that hasn't been explored until now. However several manufacturers

are making huge strides in this field; each with unique innovations.

## What is Cloud Printing?

Cloud Printing, as the name suggests, is a technology which enables you to print remotely using a printer that is connected to the internet. Newer printers that come enabled with internet access, can act as standalone devices, capable of receiving print jobs from remote servers, while older printers can replicate this function by using a computer connected to the web. What this essentially means, is that you send out your photos and documents for print from virtually any device in

the world, and have the hard copy ready when you get home. Or, you could turn in a hard copy of your work-documents from the comfort of your home.

Though the idea isn't completely new, configuring a printer on a network used to be a very tedious process. Newer solutions and offerings like Google Cloud Print (GCP) have made this entire process dead simple. All you need is a Google account (your existing Gmail account should do just fine) and an internet connected computer with Google Chrome (or an Android / iOS device) and you're good to go. HP has a similar offering called ePrint, and Fed-Ex's mobile printing lets you print a



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file on any of Fed-Ex's printers for a small fee. In fact, Fed-Ex has integrated the various cloud printing services from Google, and Breezy, a company that specializes in remote or mobile printing.

## How to Set Up Google Cloud Print

Nearly any kind of printer can support remote printing using Google Cloud Print, but if you're using one of Google's certified 'Cloud Ready Printers', the process can be a whole lot easier. These printers don't need to be connected to a desktop computer in order to print remotely, and they are standalone internet-connected printers that can receive print commands via GCP. To check if your printer is Cloud Ready, use this link - <http://dgit.in/Nn2Klt>.

If your printer isn't cloud ready, or can't connect to the internet on its own, don't worry. Even a regular printer can do the job for you, but you'll have to leave it connected to an always-on computer with an active internet connection. If you have a desktop at home that can fulfill such a requirement, you can go ahead and set it up.

1. First, ensure that your printer is set up properly to print documents from your local machine. Follow the installation guide in the form of a manual or a CD that came with your printer. Make sure you have the necessary drivers installed. Once the printer has been configured, we can proceed.
2. Open Google Chrome (available on Windows, Mac and Linux) on your desktop, and click on the 'wrench' icon near the top right corner. Click on Settings/Preferences/Options depending on your OS. Scroll down to the bottom and click 'Show Advanced Settings'.
3. Sign in to your Google account and follow the steps to complete your printer registration. You'll receive a link to manage all the printers that are currently connected to your account. From here you can view all your existing printers, as well as add/remove or share the printers with others.
4. To print a document using Google Cloud print, simply hit Ctrl+P or go

to the wrench icon > Print and select "Print With Google Cloud Print".

Select the printer to print your document/photo on and you're done!


You can even send documents and photos for print from your mobile device. Android users can use the Google Drive app to print files using Google Cloud Print. There are also several other apps like Easy Print, Fiabee or Cloud Print BETA that can send files to your connected printers. iOS users can use Print-Central Pro for similar functionality. Other mobile devices using the mobile versions of Google's sites can also take advantage of this feature. Mac users can use Cloud Printer to use Google Cloud Print from the regular print menu. For a full list of supported apps across various platforms, visit <http://dgit.in/LFaHil>

## Other Options

Fed-Ex offers a similar service called Mobile Printing, where it lets you print documents directly to any of Fed-Ex's printers, which are all self-serviced locations. When you send a document for printing, you receive a unique code. Enter the same code at the Fed-Ex office to claim your document.

HP offers a similar service with its ePrint line of printers. Each printer is given a unique email address. Simply send an email to this address containing your document as an attachment and have it printed over the cloud.

Both Fed-Ex's Mobile printing service and HP's ePrint technology can be integrated into Google Cloud Print.

A third alternative is by a California-based startup called Breezy, which calls itself 'Printing For The Mobile Generation'. The service requires you to download a small print connector app on your computer (currently Windows only) that acts a receiver for print requests from Breezy's mobile apps available for iOS, Android and Blackberry devices. Simply send a document from any supported mobile device and have it printed and ready on the printer attached to your computer running the Breezy connector. Visit [www.breezy.com](http://www.breezy.com) to find out more about their pricing plans, or if you want to use Breezy for your business. 

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## The Internet Wall of Fame

### Fred Figglehorn

Lucas Cruikshank, an American teenager created the character Fred Figglehorn on YouTube. The videos are centred on a six year old boy named Fred who has a dysfunctional home life and anger management issues. When the character got famous, Lucas started a series called

Fred which he created in 2008, and filmed two movies which aired on Nickelodeon.



### Boxxy

Boxxy is an online character, allegedly of an American girl named Catherine Wayne, known for her vlogs on 4chan. She posts energetic videos of herself under various YouTube accounts (ANewHopeee, bodaciousboxxy, and Boxxyabee) depicting her with heavy black eyeliner, rambling excitedly about random stuff, with ridiculously animated expressions.



### Perez Hilton

Originally Mario Armando Lavandeira, he is an American blogger known for his posts covering gossip about celebs on his blog Perezhilton.com since 2001. His blog drew a lot of negative criticism after he "outed" alleged closeted celebrities including Neil Patrick Harris aka Barney

Stinson. He claims to be friends with Paris Hilton, the source of his nickname.



## The Art of Advertising



### Don't Drink and Drive

Drinking responsibly is one message that almost all major breweries tend to spread out. But some choose to do it in a way that actually sticks with you. To caution people against drunk-driving Vazir Breveries printed a graphic on the crown of their beer bottles. On opening the crown, you see what happens if you drink and drive. The reverse of the crown has the Don't Drink and Drive message.



### Life is too short for the wrong job!

jobsintown.de is one of the most frequented internet job sites in Germany, and they use some pretty innovative advertising techniques. Their tagline "Life is too short for the wrong job!" is represented by this ad, where it gives a visual impression that a troubled accountant is sitting inside the ATM, giving you money.



### Mini Cooper Subway Entrance

The 'Size' campaign of Mini Cooper, a collaboration of Cooper Car Company and British Motor Corporation, attempts to demonstrate how much interior space the car has. It's strategically placed at the top of a subway entrance so it appears that several people are getting into or exiting the car. Indian advertisers have a lot to learn, we guess.



## Too embarrassed to use it?

Here's a hilarious list of 11 useful products that are too embarrassing to actually use. <http://digit.in/Llu1oz>

Unwind

### Legendary Cartoons



What started as a general reminiscence of the Jonny Quest theme song, snow-balled into a discussion of all of the

favourite cartoons from our childhood (and we all liked the same cartoons, it's like we were built to work together). So, Swat Cats, Top Cat, Speed Racer, Jonny Quest have been the center of many a nostalgic discussion.



### EURO 2012

There's something about international football... it just calls out to you. Our rounds of overnight work overlapped with the knockout stages of the Euro 2012, and we lapped it all up heartily. Some of the logics for team support were astonishing (Sid supported Czech Republic over Portugal because people in Prague were nice to him!).



### Arguments for Theism

We all have our own beliefs when it comes to the existence (or not) of God. It is probably the greatest question known to man, and as self-proclaimed torchbearers, we set about finding the answer that will lead mankind to a better future. Some of the most interesting assertions were discovered analyzed, torn apart, and made ape-shit fun of. Heavy stuff.

## digit DIARY

There was a lot different about this month. Moved offices again, and this new one is as much an obstacle course as is it an office - we have to keep twisting and turning to manoeuvre our a\*\*\*\* around. Ever the rebels, we prefer to bump into stuff occasionally rather than be on the lookout all the time. (Sid just gets a brush - the place is almost built for his size). Even as the end of the month approaches, the (in)famous 'Mumbai Monsoon' hasn't turned up. Yet. It will, though (we hope). We do enjoy our fair share of rain.

Three interns joined in - Priyanka, Tanmay and Abhishek (that's me), with Paanini continuing from the previous month. So even though Jayesh merrily flew off to San Francisco on 'official' work, everyone expected this month to "have lesser workload." Not that we finished our work any sooner. That's just not our style.

Personally, all that I had expected (and wanted) is what I eventually got. Not everyday that those three overlap. Proudly participated in the legendary Quake sessions, and my pride was repeatedly blown to pieces. Getting better, though - watch out for the return of the 'pHenom', you guys. Still, I managed to frag Raaabo a couple of (read: 6) times, though he returned the favour tenfold. Literally - tenfold. Memorable, none the less. So a big thanks to everyone - Raaabo, Nash, Sid, Jayesh, Nimish, Mithun, Anirudh, Shweta, Atul, Baiju, Vikas, and everybody else - you made my stay here worthwhile (and then some). So long then, team, and thanks for all the fish...

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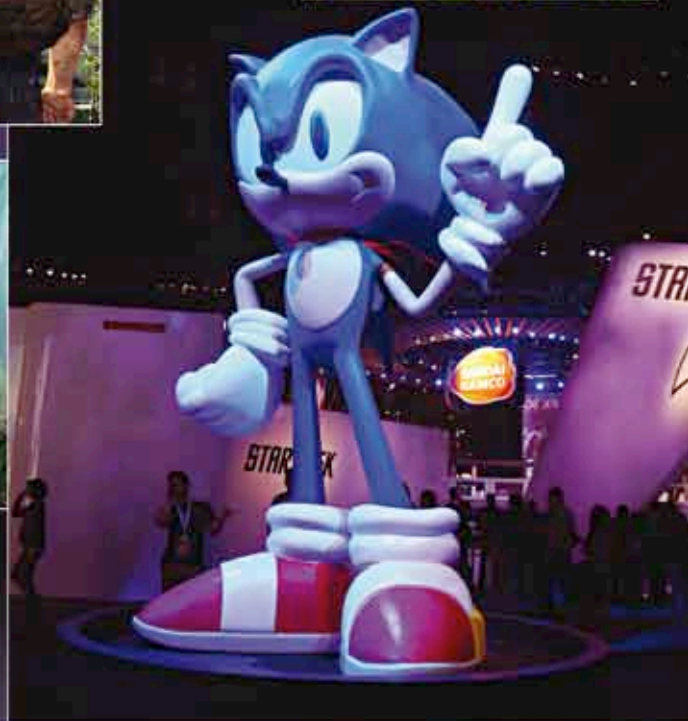
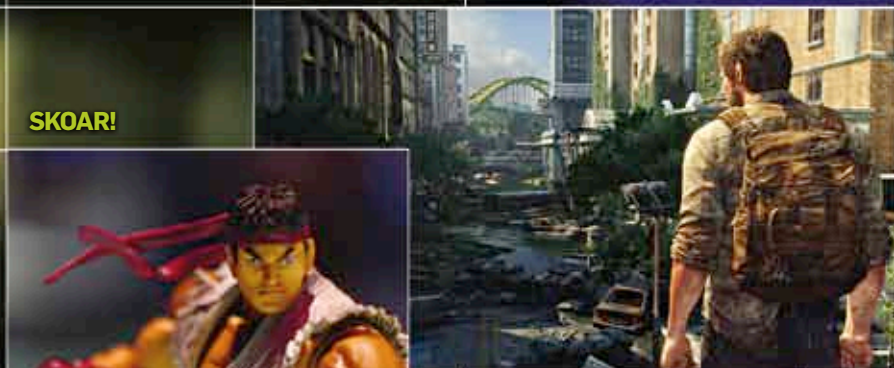
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SKOAR!

PHOTOS: SETH COLLINS



# Live from E3

Seth Collins  
[feedback@skoar.com](mailto:feedback@skoar.com)

Typically the last year in a console's life cycle causes a lull at E3; less excitement, fewer games. The console publishers are hard at work on their new systems and most publishers are working on new games that they can't unveil until the new consoles have been officially announced. This was certainly the case at E3 2012, and the reaction from the crowd made it obvious.

Beginning with the press conferences the day before the show opened, the press seemed disappointed. A few games were shown and advertised as being "new technology" but none were interactive. However, while it was certainly a down year for console gaming, PC games took center stage. While many games shown were multiplatform and will be available for PCs, Xbox 360, and PlayStation 3, it is clear that PC is now the lead platform and developers were choosing that version to display at the show. So, what stood out on the PC front? It all starts with SimCity. Developed once

again by Maxis and expected to release sometime in 2012, the game looks incredible and the entire demo just felt so charming. Depth of field and day and night cycles are used to bring life to the game graphically, with small details here and there that are sure to impress. This time the game is so full of little details – seeing housing being built, citizens move in, or houses going up for sale. The game feels more alive than ever before, without coming off as a merging of SimCity with The Sims. If we had to choose only one, this would be THE game of the show.

Borderlands 2 from Gearbox was also impressive. Fans of the original game can expect more of the same, which is nothing to complain about. The original was great. The graphics look considerably better, and it appears the game play has been refined without changing too much of what people loved. It's basically like taking the original Borderlands and amping it up several levels. The key design concept of Borderlands 2 seems to be more guns (in excess of one million of them), more excitement, and more mayhem.

While Assassin's Creed as a series has become stale, the developers seemed

to have taken great care with Assassin's Creed III and made it something just a bit different; enough to grab our attention at the show. This time the game is set during the American Revolution. Fans of platform games will be excited by the ability to run, jump and climb through trees and cliffs. The combat system has been renovated and is now more offensive, less defensive. Perhaps most importantly is the new inclusion of naval battles, which brings an entirely new aspect to the game and looked visually appealing and fun.

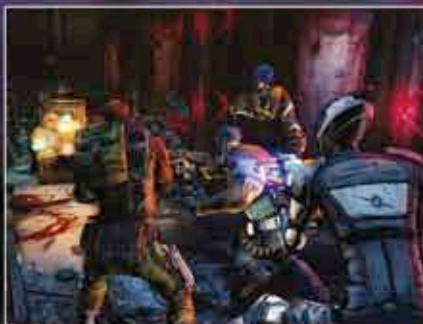
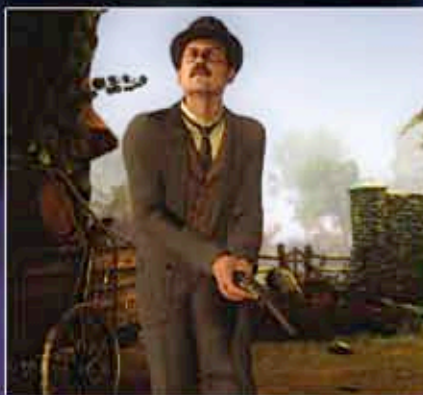
The new Tomb Raider from Square Enix was another game looking to take a longstanding series in a slightly new direction. All of the key pieces were in place – graphics looked great, the game play was fun, and the heritage here can't be questioned. The real change is in direction, with the developers looking to shift Lara Croft from almost supernatural heroine to something more vulnerable and engaging. To do so they are setting this game earlier than any in the series. It chronicles what appears to be Lara's first adventure, in which she is less in control, more an unwilling victim of circumstance than a willing adventurer.

We found the change quite engaging and think fans of the series will see it as a welcome and rewarding change of pace.

One of our personal favorites that isn't getting the attention it deserves is *The Testament of Sherlock Holmes*. Published by Focus Home Entertainment and available for PC, Xbox 360, and PlayStation 3, *Testament* is an open-world point and click type adventure game wherein you play Sherlock as he tries to unravel a mystery that places him as the lead suspect. You decide which leads to follow and which direction to take, with freedom to explore clues and investigate areas in the order you feel might work best. A new graphics engine was developed for the game, and it shows. The environments look lovely and unlike previous Holmes games, the gore is on full display. It is certainly being developed with adults in mind (though it isn't vulgar or offensive in any way) and this is a good thing, as it fits perfectly for those of us who grew up playing PC adventure games. If you are one of those people then take a close look when the game releases in September.

There were a host of other great looking exclusives for the PC. *Arma 3* aims to take first person shooters in a more serious direction, with strategy and directed combat. *End of Nations* looks to turn the real-time strategy genre on its head by combining the familiar game play with a persistent, massively multiplayer world. *PlanetSide 2* is a free-to-play massively multiplayer shooter from Sony Online Entertainment. The scope of combat was amazing and the entire game looked impressive. *Hawken* is another free-to-play title, set in a futuristic world and featuring mech combat. It's clear from these two games that free-to-play has turned a serious corner and is looking to bring in even the most hardcore gamers.

The WiiU, again, came away a bit disappointing. While many were expecting a redesigned game pad we instead received a "pro" controller that lacked a screen and looked suspiciously similar to the Xbox 360 game pad. There were frustratingly few games on display, with almost one-third of their booth dedicated to Nintendoland, their collection



of mini games expected to launch with the system. New *Super Mario Bros* for WiiU was on display, and looked nice but uninspired. If you enjoyed the game on Wii then it will most certainly be more of the same kind of fun, but it lacked the punch that one normally wants to see in a high profile launch title for a new gaming console. *Pikmin 3* was also being shown, but only using the original Wii wand and playing very much the same as *Pikmin 2*. Much of what was on display for the WiiU from other publishers amounted to little more than ports with little thought gone in to how to use the tablet controller in unique ways. With only 6 games promised for the "launch window" which is a long 3-4 months wait, I'd suggest a wait and see attitude with this console. No price or specific launch date was announced.

Sony's star of the show was undoubtedly *The Last of Us*. Developed by Naughty Dog, who also developed *Uncharted*, this was one of the few true surprises of the show for most people. On one hand the game appears to be a fairly typical adventure game, featuring action, gunplay, stealth, and platforming. But what truly set it apart was the depth with which the game handled all of its characters. While it is expected that protagonists in games will have life to them, this game seems to be handling all of the enemies with an equally high level of detail. You won't be taking on generic hordes. Instead you will be faced with enemies that have personality, motives, and humanity in a way that isn't familiar in gaming. That should

make each decision (and each kill) more difficult. The graphic engine for the game is equally impressive, and most of the audience was amazed at what was being done on such old hardware. Another star of the show for PlayStation, though it was tucked away hidden upstairs, is the upcoming "Cross Platform" update for *LittleBigPlanet*. This free downloadable update will allow you to interact with the game using a Sony Vita. Players will be able to build tools so that the Vita can be used as a touch screen controller, and they showed this with fun functions like using it as a radar to find items, or to drag objects around the main screen. What we thought was even more exciting was the cooperative, asymmetrical multiplayer aspect of the update. One player controls something on the Vita while another does something completely different on the TV, while you have to talk to help each other cooperate. It was quite fun.

*Halo 4* was of course on display and looked fantastic. Despite showings from *Gears of War* and *Forza*, it was definitely *Halo* that stole the show for Microsoft. With a new developer on board for this sequel many were unsure of what to expect, but seeing it at the show relieved any uncertainty. It is clear that the development team at 343 has great love for the series and any changes they make will stay true to what fans expect. The sound design was particularly impressive, with atmospheric and gun effects sounding considerably better than any other game in the series. *Gears of War: Judgment* looked like more of the same for the series, though a new multiplayer mode called *Overrun* did look like fun. Other than that, expect a host of Xbox Live Arcade and Kinect titles from Microsoft this year.

By the end of the show it was clear that while the three consoles manufacturers were busy throwing punches, the PC came away as the clear victor. While each console had a handful of exclusive games, the vast majority of what was on display this year is either PC exclusive or will look best on a PC. Consoles will have to wait until next year for their day in the spotlight. ✱



SKOAR!



## TOM CLANCY'S GHOST RECON FUTURE SOLDIER

Swapnil 'Flying Phoenix' Mathur feed-back@skoar.com

A third person shooter that arms you to the teeth with futuristic (yet, oddly realistic) tech with a gameplay that employs a cover based system that seems like a fine blend of that from Gears of War and Call of Duty, makes for a game that promises to keep the player engaged.

The game opens with the Ghost Team Predator hot on the trails of a dirty bomb. During the recovery mission, the bomb is set off, killing all the members of the team. Given the unexpected turn of events, another Ghost team with the call-sign Hunter is deployed to investigate the event.

The plot for Ghost Recon Future Soldier is pretty straightforward. You play as John Kozak along with Pepper, 30K and Ghost Lead as your teammates. As part of team Hunter, you travel to obscure parts of the world, either eliminating threats or investigating questionable sites as suggested by the intelligence that keep cropping as the gameplay progresses.. The story is well paced; with just enough suspense to keep our curiosity up, without having us feel completely lost as to what was going on and why we were doing what it was we were doing.

The AI makes sure that the team members act more in a supportive role rather than autonomously going ahead and eliminating enemies on their own. The game is a third person cover based shooter that switches into first-person mode in combat situations, to allow for better accuracy.

The first thing we noticed about this game is the fact that trying to play it like Call of Duty or even Gears of War will get you killed. The whole idea of the game revolves around stealth. After the first level, you're upgraded with adaptive camouflage, which allows you to be near invisible, but only when crouched or prone. There is no way to complete a mission all guns blazing. We loved that the game forces us to think and strategize before making a move.

Moving on from stealth, the game also allows for marking up to four targets that can be taken out with a synchronized shot from each of your team members. While this feature might seem straight out of Splinter Cell Conviction, Future Soldier does away with the direct-order based system and instead, uses it more like a kill-order.

Some other cool stuff includes tagging enemies using Quad Copters. While the game is based heavily on being stealthy, it does have its fair share of elaborate battles, complete with rifles, RPGs and even

giant robots that shoot mortar and missiles. Incidentally customising weapons is something you'll spend hours on. Overall if you're the kind of gamer who wants more than just "running around, shooting stuff", Future Soldier is definitely for you. ★

### Verdict


If you're the kind of gamer who wants more than just "running around, shooting stuff", Future Soldier is DEFINITELY for you. It forces you to play slow, think and strategize before you act. It emphasizes on the importance of team work.

### MOAR!

- » **Developer:** Ubisoft
- » **Publisher:** Ubisoft
- » **Platforms:** Xbox 360, Playstation 3, PC
- » **Price:** ₹2,599 (Xbox 360 and PS3), ₹999 (PC)







SKOAR!

Is social gaming a waste of time or is it the next best thing in gaming? **SKOAR's** own "Psycho Mantis" and "Big Daddy" debate over the issue.

# SOCIAL GAMING: A NUISANCE?

## YES – IT'S A NUISANCE!

When you hear the word social gaming, the first thing that comes to mind is Farmville. Social networking sites like Facebook and Google Plus are full of mindless games like CityVille, Poker, Pool, Bubble Island, so on and so forth. These games consume your bandwidth, keep you hooked to a computer screen and encourage you to waste real money on buying things that don't really exist.

The biggest reason why social gaming is useless is that the games lack depth. You pick up one activity and just stick to it. Every second game you play feels just like the last one with different colors and objects. There is no story, no real action, and no motive to keep on going and definitely no feeling of success once you've accomplished your goal. Just plant another batch of cabbage.

Since its inception, gaming has always been about getting a high score and beating your friends. Even today, games like Call of Duty, Uncharted, Halo and more, all have a stellar story, gripping gameplay and online features where you

can take on your friend's head to head to prove who is the king of the hill. In social gaming, all you can do is send requests to your friends to come and grow carrots with you! What's the purpose of that? What happened to the adrenaline rush from winning by that nanosecond?

Even in the same genre, every social game feels the same. In traditional gaming, every game feels different – for e.g. racing. You may master NFS but struggle with DiRT. The handling and performance of each car is distinctive and special. That's what gaming is all about, giving you the experience of the real world on a virtual screen. Not just random mindless clicking.

## NO – IT'S NOT!

Social games are simple and lack depth because they're meant to be. Some of them capture the lost era of arcade games that we all grew up playing – it has a bit of sentimental value. That's why games like Farmville were such a hit. They never tried aiming themselves at the same audience that plays Call Of Duty. That's never the point with social gaming.

From a developer's perspective, social gaming is a blessing in disguise. Social networks are transforming the way content is consumed online, and they're the long awaited medium for game developers to tap into beautifully. Social games are the ideal starting point for a young developer who has nothing to lose. The barrier of entry is quite low, game development cycles are short – sometimes just a few months long – and, unlike traditional big-budget games, you don't end up betting your bank balance on an idea that may or may not work. So, social gaming is less risky as well. What's more, with Facebook having over 900 million users, a social game already has a large audience ready to play the game. Social gaming is an important cog in the overall gaming market, moreso for a developer who wants to try something without too much risk.

Finally, social gaming, over the past few years, has introduced gaming to a whole new audience of gamers who were never interested in traditional gaming. As far as gaming is concerned, this can only be a good trend – more people busy with some kind of gaming or the other. I rest my case. \*



## Reddit 101

Close on the heels of PBS's short and sweet video on Reddit, Mashable has a complete Reddit 101 <http://dgit.in/LbqPJP>



## Why iOS 6 may fail?

Lots of disappointment from the first iOS 6 beta update. Here is why it might fail! <http://dgit.in/Kvweh0>

Head over to **online communities** for some of the best discussions, buying advice and user reviews. Of course, you'll meet like-minded (and not-so-like-minded) geeks, leading to some of the most constructive arguments you'll ever have.

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**KC Lanchenba**

hi, i used to connect to the internet by using opera mini in my phone nokia x2 00. But lately the phone could not open any apps on it ,not even games.i tried switching it off again and starting it. But the phone screen glowed and could not be shut down. So i removed the battery and replaced it. Since then i had been starting my phone like that whenever i shut it down. But till now i cannot start any apps . How can i solve this problem? Thanks.

Like · Comment · Yesterday at 07:38



**Sujaykumar Hublikar** I think ur phone memory is totally used its better to backup ur data to a pc n restore ur factory settings keep phone memory empty as much as possible or it might b due to virus too scan for virus

Yesterday at 08:44 via Mobile · Like · 1



**KC Lanchenba** thx. I try. I'll get bck if it dont wrk.

21 hours ago via Mobile · Like



**Sujaykumar Hublikar** Ok

6 hours ago via Mobile · Like

Digit India, add a comment...



**Ravi Sekhar Veenam**

hal team Digit...

I have small prblm, hope u can giv proper solution to fix it . . .

i am unable to open any attachments in my gmail, even i cant able to download them...aftr geting this prblm i checked in othr id's also like yahoo, rediff etc but same prblm.

plz giv me any solution !

due to this prblm i am unable to open my resume.

Like · Comment · Friday at 23:53



**Sutosom Ghosh** u shud reinstall da newr vrsn/update ur browser and delete cookies,cache,history etc from Internet Options in Control Panel.

Yesterday at 00:34 via Mobile · Like



**Sutosom Ghosh** Enable Cookies. Install a flash player . Install a PDF reader(like Acrobat Reader) to ur P.C. and Installing a download manager also may hlp u..

Yesterday at 00:36 via Mobile · Like

Digit India, add a comment...



**Saransh Kataria**

Hey guys,  
[Off Topic]

But how many of you did protest today?

Tanmay Patange plz remove this post if you don't find it suitable here :)

Like · Comment · Follow post · 9 June at 21:09 near Delhi, India



**Achuth Krishnan** I did :D

9 June at 21:12 via Mobile · Like · 1



**Tanmay Patange** We are here to interact with several geeks & digit readers & we can discuss here anything just like forum. Only posting the contents which includes spamming or own blog's URL are not allow here :-)

9 June at 21:16 · Like



**Prateek Sachdeva** protest against wt?

9 June at 22:41 · Like



**Saransh Kataria** internet censorship

9 June at 22:42 · Like · 1



**Tejas Gupta** Nothing happnd in my city :(

10 June at 09:46 · Like



**Tanmay Patange** 75 peoples were busy here in the protest at Azad Maidan Mumbai, but most of them were confused while replying to media's questions :-)

10 June at 12:51 · Like



**Prateek Sachdeva** so did u count them huh??

10 June at 12:56 via Mobile · Like · 3



**Tanmay Patange** Yup :D

10 June at 12:56 · Like · 1



**Achuth Krishnan** 46 people attended the rally and meeting here at Martyr's column, Thiruvananthapuram :D

10 June at 13:14 via Mobile · Like · 1

Write a comment...



**Yatin Agarwal**

The question is...

What will you prefer for Intel Core i7-3770K Ivy Bridge as Motherboard  
do list the box price too...I  
Awaiting your reply team digit

Like · Comment · Friday at 09:06



**Aniket Borah** Depends on your budget

Friday at 10:37 · Like



**Yatin Agarwal** My budget is 50,000 for the PC  
And I don't need a gpu  
can u please tel me in d budget of 10 to 15 thousand

Friday at 11:05 via Mobile · Like



**Aniket Borah** This-  
<http://www.flipkart.com/asus-pl277-v-motherboard/p/itm28b6vwa3un/yx7pki=MBDO88VGT4WP28T8ref=d9e343B-967c-44ea-8fcd-a64e741c9a09>



**Abhirup Guhaniyogi**

What is the current price of Samsung Galaxy Y In Kolkata?

Like · Comment · Follow post · 5 June at 13:00



**Vipin Kumar** It sucks,dont buy it.

5 June at 17:46 via Mobile · Like · 1



**Sourabha Shukla** 7 K to 7.5 K

5 June at 17:52 · Like



**Tanmay Patange** Vipin It's not possible for everyone to get Galaxy S III or Galaxy Tab. I don't think it sucks because it is the cheapest one with less price & great performance so I will recommend it :-)

5 June at 20:19 · Like · 1



**Siddhartha Sharma** htc explorer 8k at tradeus...definitely recommended

5 June at 21:08 · Like · 1



**Ankit Itanka** You can get d best price of approx 7 k from mobile station, mulick fatah, howrah. I purchased from dere only, after doing a fair amount of price query...

6 June at 13:44 via Mobile · Like



**Vipin Kumar** bro,i had to buy, I'd rather go for htc explorer by paying 1k more.galaxy y's got poor screen res. n who says its cheapest one, optimus me is cheaper n better thn it :-)

6 June at 14:25 via Mobile · Like

Write a comment...





## Ads into free Skype call

Skype plans to insert ads into the conversations of people who do not have Skype Credit <http://dgit.in/KvTW1m>



## "Poo Poo"

The entire world calls it "Siri", but Steve Wozniak, the co-founder of Apple says, Siri is "Poo Poo". <http://dgit.in/NEyGNUV>

Community

**ANshul Sharma**  
which one should I choose??  
blackberry playbook or HCL me tablet  
Like · Comment · 20 June at 10:43

Yogesh Lather likes this.

**Yogesh Lather** its obvious ba  
20 June at 08:26 · Like

**Yogesh Lather** lackberry playbook!  
20 June at 08:26 · Like

**ANshul Sharma** But there r sum drawbacks man... Internet can be accessed only via WiFi ... No tangle connectivity, limited apps on the other hand hd has camera worst of both world... Tangle n wifi cncctivity ya bt JCS ...

Aghmmmm n totally confused  
20 June at 10:12 via Mobile · Like

**Yogesh Lather** then take micromax funbook! its goooooo! n with the price tag of almos half [www.micromaxfunbook.com/](http://www.micromaxfunbook.com/)

**Micromax Funbook | Micromax Tablet**  
[Android 4.0 Tablet] [Android Tablet India, Best Android Tablet in India] [www.micromaxfunbook.com](http://www.micromaxfunbook.com)  
Micromax funbook, a cheap android tablet in india which is an icecream sandwich ...  
See more

20 June at 11:33 · Like · Remove preview

**ANshul Sharma** yes dis is nice pick... A very good budget tablet bt 'micromax' ... Bas ye bekar hai... Han bt i guess playbook is the best among all... Usko hi try kryta hu... We can tether playbook to connect to internet apart from wifi... :)

after all than for ur valuable suggestions :)  
20 June at 11:37 via Mobile · Like

**Sai Kumar Dwivedi**  
Can I connect nokia phone as modem in Ubuntu 10.04 ???  
Like · Comment · 20 June at 12:59

**Sanket Naik** ya, u can connect.....  
20 June at 13:12 via Mobile · Like

**Sai Kumar Dwivedi** hv??? Nokia has nt lauched ne official softwar for linux. Earlier a guy devolpd hs own version 'Nokuntu' . Bt nw its nt workin...  
20 June at 13:16 via Mobile · Like

**Ravi Kumar** yu dnt need any spd soft to connect yr phone to pc jst plug yr phone via usb or bluetooth and configure connection via network setting.  
20 June at 17:10 via Mobile · Like

**Sai Kumar Dwivedi** its needs an interfac to recogn it as a modem...

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REASON 6

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Check out the thread below where our forum members are in deep discussion over some of the greater problems in life. Find this and other interesting conversations in our chit-chat section.

**ssk\_the\_g8**  
Re: Refusal to pay for apps/software  
thats to our local computer shopwales, the notion of software being free had been embedded in our minds (cheap antvirus being the only exception).  
now i see people spending 25k - 30k on the latest nokia, lg etc. phone and refusing to pay even 50 bucks for an app useful to them. They are willing to waste 500 bucks on a pizza but not 50 on an app and the worst part is the sense of achievement that people feel on doing this - Perfect example was one of my friends who quickly rooted his new optimus and downloaded several pirated APK's - deployed them and was so happy about it, there is absolutely no sense of regret, they simply don't understand that if they pay they'll get better software later, it will help in development. **The kind of adrenaline rush that Indians get out of free stuff is hilarious.**  
So why is it so?  
is it because apps/software are not physical that indians don't want to pay for them?  
Most Indians don't consider pirating apps as stealing?  
or because of the hypocritical and selfish nature of us indians?  
What do you'll think?  
And On the 6th day, God created Manchester united :)  
(Gen 1:16-27) New Testament

**nbaztec**  
Re: Refusal to pay for apps/software  
Quite.  
Originally Posted by **Champ** :  
We do it simply because we can. Give us a way of getting free hardware and we will take that also.  
Its good that in India we don't get hardware at subsidised rates/free with contract, or number of defaults will be quite high :)  
This. Exactly.  
Now only to figure out how to pirate free pizzas. Don't worry I'll buy one if I like it :)  
AMD Phenom II X6 1055T | MSI 880GMA-G4K | 2x2 Corsair DDR2 1333MHz | CM Elite 310 | Corsair CX400W | DELL ST2220L

**Anorion**  
Re: Refusal to pay for apps/software  
when you pay for groceries, electricity, water ... why not pay for apps as well?  
when you pirate a movie or a song, there is no stress on the resources of the publisher when a game gets pirated, the studio still has to allocate resources for the increased server load, and there is also the cost of giving support to all the pirated copies  
good news is that the publishers are meeting us half way, even games you play alone on your system needs to connect to a server  
Steam is a good example of this, if playing really gets convenient, and support and updates are un-intrusive, you can expect that platform to flourish  
IDDQD IDDQ4



# Domain name 101

Understanding domains and their hierarchy is an interesting way to analyze the Internet highways that we knowingly or unknowingly tread on a daily basis. We also take an aim at busting some common domain jargon



## TLD

TLD simply expands to Top-Level Domain. To understand what a TLD is, you should first know the basic parts called labels. Let's take the example of the following web address, [www.thinkdigit.com](http://www.thinkdigit.com). In this case, 'www', 'thinkdigit' and '.com' are three distinct labels of a domain name. Here the '.com' bit is a top-level domain, while the part 'thinkdigit' (pointing to a working website) is called a hostname and 'www' is a subdomain of 'thinkdigit'.

A top-level domain constitutes one of the domains at the highest level in the working of the Internet's hierarchy of domain name system. The most prominent example of a TLD is the '.com' domain.

There are different types of TLDs as defined by ICANN (Internet Corporation for Assigned Names & Numbers), the governing body of all things related to Internet domain names. Let's take a closer look at them.

## gTLD

A gTLD or generic Top-Level Domain is a sub-set of TLDs that don't have any specific geographic relevance to their audience, neither do they have any affinity towards any specific country or group. Popular examples of gTLDs include '.com', '.net', '.info' and '.org' domains. Absolutely anyone can buy and register a gTLD domain name from an ICANN-authorized domain registrar on a first-come first-served basis, you don't need to show any proof while registering since there's nothing of special relevance to gTLDs. They are, one can say, the most common commodities of the domain name space.

## ccTLD

This is a special type of top-level domain, ccTLD or country code top-level domain, meant, as you can imagine, for identifying websites or organizations from specific countries. Where we saw no restriction on the size of gTLDs above, rules specific to ccTLDs dictate them to be no longer than two characters long. You can see it in examples such as 'nike.in' (Nike's India operations) or 'google.cn' (Google's homepage for people from China).


The rules and requirements for purchasing a ccTLD differ from one country or region to another: for e.g., anyone can just buy a '.in' domain name without showing any proof, whereas '.de' and '.ca' registrations for the German and Canadian ccTLD, respectively, require you to prove you belong to those nations.

## GeoTLD

A geographic top-level domain or GeoTLD is slightly similar in concept to the above-mentioned ccTLD. Just as ccTLDs are specific to countries, GeoTLDs are specific to broader (yet specific) geographies. For example, '.asia' is an ideal example of a GeoTLD. So is the '.eu' for European Union – although '.eu' is classified as a ccTLD, it technically doesn't correspond to any particular country within the European Union. A whole list of GeoTLDs have been proposed by several domain registrars to ICANN, awaiting its approval.

## sTLD

An interesting sub-set of TLDs, an sTLD or sponsored top-level domain is accredited towards certain private or government organizations which fund them. They can restrict and control the entry of new domains registered under these special digital zones. Think of them, as private, invitation-only clubs.

Prominent examples of sTLDs include '.gov' (The United States government), '.mil' (The United States Army), '.edu' (sponsored by EDUCAUSE), '.mobi' (sponsored by dotMobi), and so on and so forth. As you can see from the examples above, all the sTLDs have a sponsor or a group backing it, but some, such as '.edu' are for non-profit use. 

We bust some common jargon prevalent in the domain name and domain registration business.

### 1) Cybersquatting

It's a known evil of being able to register a domain with no strings attached. Cybersquatting is the practice of blocking (or buying) a domain name including the exact copyrighted characters of a company or organization (which doesn't have a website) with the motive of profiting from its resale. Many a times cybersquatters don't even have a website on the blocked domain name.

### 2) Domain parking

Domain parking is the practice of registering a domain name but not developing it. For example, if you buy a domain name but don't use it for hosting a website, sending receiving emails, etc., then you're merely parking a domain for future use. Domain parking done for the wrong reasons actually classifies as cybersquatting.

### 3) Internationalized Domain Name(IDN)

Internationalized domain name contains at least one 'label' (refer to TLD paragraph) of the domain that has non-English, international script. For example, the presence of Arabic or Chinese characters in Arabic or Chinese websites – people not conversant with these languages won't be able to read these domain names.

### 4) WHOIS

Simply put, WHOIS is a collection of database entries and also the means to access them over the Internet. If you need to find any information about who owns a specific domain name, WHOIS lets you access that information.

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